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**Facilitating Knowledge Exchange between Healthcare Professionals, Organisations and Sectors**

**The Impact of Boundary Spanning Processes on Quality Improvement and Integration**

Nasir, Laura Calamos

*Awarding institution:*  
King's College London

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**Facilitating Knowledge Exchange between Healthcare  
Professionals, Organisations and Sectors:  
The Impact of Boundary Spanning Processes on Quality  
Improvement and Integration**

**Laura Calamos Nasir**

**a thesis submitted to King's College London  
for the Degree of Doctor of Philosophy**

**August 2013**

## **ABSTRACT**

### **RATIONALE and AIM**

Integrating healthcare has been a long-standing objective of policy-makers internationally. Patients and practitioners alike want timely care, without sacrificing quality. Yet fragmentation continues, contributing to miscommunication and inadequate treatment. How to enable system-wide coordination for seamless service delivery remains unclear. 'Boundary spanning' interventions purport to bridge silos and link expertise. This thesis examines the processes which enable knowledge exchange between different professions, organisations, and sectors and how such boundary spanning activities contribute to service integration and improved quality of care.

### **DESIGN and METHODS**

A longitudinal case study design, with mixed qualitative and ethnographic methods, was used to identify system-wide barriers and enablers to service integration efforts, from 2009-2012. An interdisciplinary project in England provided four case studies of boundary spanning activity. Themes were generated from a meta-ethnographic synthesis of boundary spanning literature, then from ethnographic fieldnotes and recorded interview transcripts. Staff serial online diaries and patient focus groups added depth to understanding the boundary spanning processes in context. Nonaka's SECI (Socialisation→Externalisation→Combination→Internalisation) model - never applied before in healthcare - was used to analyse how tacit and explicit knowledge were exchanged within and across the four cases.

### **RESULTS**

Boundary spanning activity in the form of multi-disciplinary teams, professional exchanges, and educational events did improve knowledge exchange at professional, organisational, and sectoral levels. Socialisation was a necessary but insufficient condition for tacit to explicit knowledge movement. Knowledge exchange was not persistent without facilitated dialogue (externalisation) and jointly implemented protocols (combination). Knowledge exchange led to horizontal integration through frequent staff outreach and link workers. For vertical integration, cross-sectoral negotiations and repeated accountability-sharing discussions were effective. In two of four cases, adaptable management styles and routine reflection were needed for sustainable success (internalisation). Patient care was measurably affected only when mentored problem-solving and embedded data collection were in place. This study applied a useful model in a novel setting, and contributes to understanding how knowledge exchange happens in context at the micro level in dynamic healthcare systems.

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## **List of Abbreviations**

<b>BME:</b>	Black & Minority Ethnic
<b>CBT:</b>	Cognitive Behavioural Therapy
<b>CCG:</b>	Clinical Commissioning Group
<b>CLAHRC:</b>	Collaboration for Leadership in Applied Health Research and Care
<b>CoP:</b>	Communities of Practice
<b>CPD:</b>	Continuing Professional Development
<b>D&amp;R:</b>	Development and Research network
<b>DSN:</b>	Diabetic Specialist Nurse
<b>GP:</b>	General Practitioner
<b>IAPT:</b>	Improving Access to Psychological Therapies
<b>ICO:</b>	Integrated Care Organisation
<b>IMD:</b>	Index of Multiple Deprivation
<b>LHC:</b>	Local Health Community
<b>LINK:</b>	Local Involvement Network
<b>LMFT:</b>	Local Multidisciplinary Facilitation Teams
<b>LTC:</b>	Long-term Care
<b>MHWBS:</b>	Mental Health and Wellbeing Service
<b>MMSE:</b>	Mini-Mental Status Examination
<b>OECD:</b>	Organisation for Economic Co-operation and Development
<b>PAR:</b>	Participatory Action Research
<b>PBC:</b>	Practice Based Commissioning
<b>PCT:</b>	Primary Care Trust
<b>QIPP:</b>	Quality, Innovation, Productivity and Prevention
<b>QOF:</b>	Quality Outcomes Framework
<b>R&amp;D:</b>	Research and Development
<b>SECI:</b>	(Socialisation → Externalisation → Combination → Internalisation)
<b>WHO:</b>	World Health Organisation
<b>WI:</b>	Westpark Initiative
<b>YOC:</b>	Year of Care

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## **EXECUTIVE SUMMARY**

### **INTRODUCTION**

The integration of health (and social) care services has been an objective of policy-makers internationally since the 1970s. Patients and practitioners alike want effective and timely care, without having to sacrifice safety or quality. Yet, how system-wide coordination is enabled for a seamless delivery of services remains unclear. Fragmentation continues in healthcare, widely contributing to miscommunication, and inadequate treatment.

### **BACKGROUND**

'Boundary spanning' interventions purport to bridge silos between professional disciplines and provide links across organisations and sectors. Individual boundary spanners often serve as liaisons and conduits for expert knowledge in large and complex systems. Management literature has examined boundary spanning since 1967, and over the last few decades research in the information technology sector has examined how innovative knowledge moves through boundary spanners between organisations. In the health professions, evidence-based practice has been taught widely, and ways to implement effective teamwork in the hospital has been well studied. Yet relatively little is known about how people and groups who function in boundary spanning positions, particularly in complex healthcare systems, effectively share knowledge and collaborate to improve the quality of care and clinical outcomes.

### **PURPOSE**

The purpose of this study is to describe how boundary spanning activities function in healthcare settings to provide solutions for linking and improving patient care across professions, organisations and sectors. There are two research questions: (1) Does boundary spanning actively lead to knowledge exchange, and if so, what activities facilitate or impede the sharing of information across boundaries? (2) Does knowledge exchange lead to vertical and horizontal integration and if so, how do boundary spanning activities contribute to, or counteract, improvements in patient care, particularly in the effort to provide more seamless services.

### **DESIGN**

A longitudinal nested case study design was used to investigate four multidisciplinary cases working to improve healthcare services. Boundary spanning activities were observed in context for 34 months using ethnographic methods. The setting consisted of an newly formed multi-disciplinary project called the 'Westpark Initiative' in inner-city London where local stakeholders sought to design their own interventions to improve

the integration of local healthcare services. Four multi-disciplinary groups were formed by interested members of the professional community. Each group focused their efforts to integrate services across different boundaries: (1) the Anxiety & Depression in Black and Minority Ethnic Populations case attempted to link primary care and community-based mental health services, (2) the Diabetes case attempted to link primary care and hospital-based specialist care, (3) the Dementia case attempted to link primary and social care, and (4) the Child & Family Services case attempted to link primary care and care in the community and voluntary sector.

## **METHODS**

Mixed qualitative methods were used with instruments designed specifically for this study. A longitudinal design was used to identify system-wide barriers and enablers to horizontal and vertical service integration from 2009-2012. Data were collected across a broad system of care including: 42 semi-structured staff interviews, 361 hours of participant observations, 36 online serial diaries, two patient and carer focus groups, and historical document analysis. NVivo 9 was used to analyse the data to generate themes from the fieldnotes and recorded interview transcripts. Themes from a boundary spanning literature review, including noted barriers and enablers of vertical and horizontal integration were identified. A management theory that describes knowledge exchange in complex organisations was selected as an additional analytical framework to add further depth to the investigation. Nonaka's SECI (Socialisation → Externalisation → Combination → Internalisation) model was used to explore how tacit and explicit knowledge were exchanged, how innovative solutions surfaced, and how patient outcomes were defined by each of the cases, and in combined dimensions. The SECI model has never previously been applied to the healthcare setting.

## **RESULTS**

Facilitated learning events provided empowering professional socialisation for participants of all four cases, which helped tacit knowledge cross individual, organisational, and sectoral boundaries. Missed opportunities for sharing expertise were observed in all contexts, noting that mentored group meetings, flexible meeting agendas, and appropriate goal setting was crucial to move tacit knowledge across boundaries and surface integrating solutions through combination and dialogue. Socialisation and charismatic leadership was not enough to affect integration. Barriers to exchanging both tacit and explicit knowledge included practice managers functioning as gatekeepers, supervisors' adaptive style, competing accountability concerns, and political (and financial) imbalances. Explicit knowledge exchange through construction of products and introduction of systemised solutions was noted in the Anxiety &



Depression, Diabetes, and Child & Family Services cases, particularly where enabled by external resources (including funding). The Anxiety & Depression case had a well-defined goal (from national guidelines) of increasing referrals to talk therapy, which was measurable, and achieved. The Diabetes case achieved vertical integration with the opening of community-based clinics staffed by Diabetic Specialist Nurses. These two cases also demonstrated movement of explicit knowledge to internalised tacit knowledge, which routinised integrating solutions for more chance of lasting success. Only limited knowledge exchange was accomplished through informational sessions and leaflets by the two remaining cases, as the Dementia and Child & Family Services case struggled to make any lasting links between general practice and secondary care. Scalability was a concern, particularly where redundancies and reorganisations were experienced in the local context, which impeded horizontal integration efforts by these cases. All four cases struggled to define meaningful measures to link their integration goals with patient outcomes, and all experienced top-down pressures to use quantitative national measures, despite being deemed too insensitive to judge impact of integration on patient care. The Anxiety & Depression case had the most ability to embed reflection in their daily practice, more ability to surface innovative local solutions, and the benefit of funding for routinised team-building activities. Persistent mentoring and routine learning sets about embedding data collection in practice was a necessary though time-consuming factor in leading quality improvement efforts, especially by those groups attempting new local methods of integration.

## **CONCLUSION**

Boundary spanning activity can increase opportunities for knowledge exchange, which in turn can lead to integration – but there are important variations in context, which enable the kind of local innovations, which contribute to lasting connections between professions, organisations, and sectors. Knowledge exchange did enable integrating solutions, especially when moving from tacit to explicit, though socialisation was not enough. Horizontal integration was achieved with link workers and frequent outreach to the local population and practitioners. Vertical integration was achieved through political negotiations and repeated accountability-sharing discussions. Locally responsive cross-boundary teams and adaptable management styles appear to play a role in the development of innovative solutions. Systemising problem-solving processes and embedding data collection were also important aspects of integration efforts. Reflective practices, which included learning about how to embed data collection, appear to play a role in longitudinal success. Future research will need to clarify methods for measuring the impact of boundary spanning activities through a range of tools that describe, examine, and measure the outcomes of multi-disciplinary,

multi-level interventions that span complex interfaces in healthcare. There remains a distinct need to further the empiric study of how integration contributes directly to improving patient outcomes and the quality of care – and how to extend this learning to teach future healthcare practitioners to span boundaries, recognise, and implement innovative solutions, and provide truly continuous services in all settings.

## **CHAPTER 1      Background and Objectives**

### **1.1      Introduction**

The origin of this study is based in my experiences as a nurse practitioner, as a teacher of novice healthcare providers, and as having been both a patient and carer. The inspiration was my own observations of errors (both small and large) happening at every level, and wondering how to make healthcare better. The present study seeks to examine how to link aspects of excellent healthcare. This study contributes to knowledge about how to improve connections between healthcare professions, organisations, and sectors for more effective services. A contribution to the empirical study of boundary spanning is provided with an in-depth investigation placed within the dynamic context of healthcare provision. By examining how multi-disciplinary groups exchange knowledge and design their own local solutions to integrate patient care, this study presents the barriers, and success factors, which may help to enable clinicians and healthcare leaders to better contribute to quality improvement.

The purpose of Chapter 1 is to provide an outline and frame for the present study. Section 1.2 presents the problems of fragmentation, definitions, and models of integration, and describes the policy context for why integration is sought as a goal for healthcare. The potential solutions of team working, knowledge exchange, and boundary spanning are introduced. Section 1.3 sets up the purpose of the study, to examine how integration may be achieved through boundary spanning solutions, and presents the research questions of the study. Section 1.4 provides the context of the present study and Section 1.5 outlines the structure of the remainder of the thesis.

### **1.2      Policy Context – The Problem of Fragmentation**

Fragmentation is a major problem in modern healthcare as patients with non-communicable, or chronic, conditions increasingly require care from multiple providers in different settings. Chronic diseases, such as heart disease, stroke, cancer, and diabetes are the leading cause of morbidity and mortality world-wide, causing 63% of

all deaths, 36 million deaths annually. The global burden of chronic disease is predicted to increase over the next decade, particularly as lifespans increase, and despite preventable causes (WHO, 2011). Co-morbid conditions and increased specialisation aggravate such fragmentation, especially in healthcare systems already formed of silos (Enthoven, 2009). The Commonwealth Fund describes *fragmentation* in healthcare delivery as the systemic misalignment of incentives, or lack of coordination, that spawns inefficient allocation of resources or harm to patients. Such fragmentation negatively impacts outcomes, quality, and costs. (Shih, Davis, Schoenbaum, Gauthier, et al. 2008).

Healthcare costs are a related concern. Expenditures on healthcare have outpaced gross domestic product (GDP) in every country in the US, UK and the EU, except Luxemburg, since 2000, with an average increase almost two times faster than economic growth for most OECD countries (OECD, 2011). Though costs have increased, quality of care, quality of life, and quantity of life have not uniformly improved (Berwick 2008). Consequences include inefficiency, ineffectiveness, and inequality in how services are provided (Stange, 2009). The World Health Organisation (WHO) has reported that 20% to 40% of all health spending is wasted on inefficiency (Evans & Etienne, 2010).

Reorganisation in the UK, in the form of commissioning centred around general practice, has been a policy goal since the release of the white paper 'Equity and Excellence: Liberating the NHS,' which called for patient-centred care and urged clinicians to continuously improve and innovate based on outcomes evaluation (Department of Health, 2010). Policies initiated by the Patient Protection and Affordable Care Act (enacted in March, 2010, and constitutionally upheld in 2012) in part attempt to achieve lower costs and aim for better continuity of care in the US. The pressure to lower costs remains in focus, but little is known about how exactly to accomplish the twin goals of improvement and innovation, whilst at the same time

increasing the quality of healthcare. Interest in developing service coordination remains high amongst policy-makers and researchers, as demonstrated by King's Fund reports exploring how clinical service integration relates to improved patient outcomes (Ham & Curry, 2010; Ham, 2011).

### **1.2.1 Models of Integrated Care**

In a 2001 position paper by the WHO European office, the integration of health and social services was seen as a priority for improving the performance of many health systems. Driving forces for health care reform were said to come from demand-side factors, such as demographic changes and epidemiological transitions, and from supply-side factors, such as information systems, medical technologies and economic pressures (Gröne & Garcia-Barbero, 2001). For over a decade, improving linkages between levels of care has been seen as a organisational goal for health systems by policy-makers in many countries, including the United States (IOM, 2001), and the United Kingdom (Darzi, 2008). Very recently, a joint report from the King's Fund and the Nuffield Trust called for the integration of service to be organised around patients and populations, with a focus on achieving better outcomes (Goodwin, et al., 2012),

In an international report, a World Health Organisation technical brief defines *Integrated Service Delivery* as "the organisation and management of health services that people get the care they need, when they need it, in ways that are user-friendly, achieve the desired results and provide value for money" (WHO, 2008, p.1). The brief continues to explain that integration is neither good nor bad but is best seen as a continuum of services with many possible versions at different service levels. The WHO brief acknowledges that a 'mix of political, technical and administration action' is required at numerous service levels.

To improve the provision of healthcare it is first necessary to describe the context of how services are arranged. "Systems Thinking" has been described as a way of understanding how organisations consist of individuals, processes, and structures, all

of which work together. The practice of understanding how components function in the context of their relationships, is a problem-solving discipline that enables a more complex understanding beyond simple cause and effect (Senge, 1990). There are numerous models of integrated care, and some concepts shared by each, including the ideas of a unit of coordinated care, a healthcare team, and stepped care.

In the US, the mainstream theory of a 'medical home' implies a central coordination function for case management, patient and referral tracking, medical screening and care, and evidence based treatment. In the UK, the primary care trusts (PCTs), and now clinical commissioning groups (CCGs), serve similar functions, including efforts to ensure the control of costs and equitable distribution of services. A *multidisciplinary healthcare team*, which includes a variety of professionals who share the different facets of care provision, is another common element of integrated care models. *Stepped care* is a common concept in integrated care models with a goal that patients receive the least disruptive, least intensive, least extensive, and least expensive care possible to get positive results. If a patient's functioning does not improve through the initial levels of care provided, then the level of care is stepped up to a higher intensity to meet their healthcare needs (Collins, Hewson, Munger & Wade, 2010).

These concepts, as related to integrated care, very often imply that integration is a model for services that are provided within, and a part of, primary care, beyond but encompassing professional collaboration and teamwork, at a system level. Policy makers continue to debate which practice models are ideal, and whether services should be unified, collaborative, coordinated, or co-located. Integrating models for service delivery in the US, such as Kaiser Health Maintenance Organisation (HMO) in California, the Veterans Administration (VA), Community Oriented Primary Care (COPC), and the 'Medical Home' model have taken diverse forms, though lower costs, increased access, increased regimen compliance, and overall clinician work satisfaction overall have not been widely realised (Bodenheimer, 2003; 2008).

Critics of integration argue that the goal of integration does not take into account inequities that exist in real settings, where the means to focus on local targets are needed, often, in exceptional situations, and bearing geographical impracticalities. A Cochrane review of studies about integrating healthcare services in low and middle income countries found very few examinations (only five) with empirical evidence showing integration as a potential solution for fragmented care (Briggs & Garner, 2006); no such empirical reviews exist for studies of integration in the UK. Research continues to show limited evidence of the benefits of networks, particularly regarding vertical integration (Ramsay, Fulop & Edwards, 2009).

Further, how integration is linked to quality of care is still poorly understood. Whilst academics and policy-makers have described many models and frameworks for top-down redesign, reorganisation, and/or realignment, there is a paucity of evidence about how the daily practice of integration happens. Donabedian's classic 1966 article (reprinted in the same journal in 2005) on the evaluation of healthcare quality attempts to define quality at the physician-provider level, and describes the potential limitations of outcomes as the criteria for judging medical care. His philosophical stance about methods for measuring quality drew attention to the risk of focusing too closely on the technical management of disease without paying attention to the coordination and continuity of care. However, Donabedian intentionally avoided linking quality to efforts to describe management goals, delivery of care at the community level, or a larger social context (1966). Since then, efforts to monitor aspects of a healthcare system within a macro context have increased as an important part of many fields, including public health (Handler, Issel, & Turnock, 2001; Murray & Frenk, 2000).

A recent systematic review of the evidence in the study of health systems integration found significant research gaps and a lack of empirical studies about how systems can improve service delivery – and improve the health of populations. The authors found no universal definition of integration or model of integration. Importantly they found no

standardised, validated tools that have been systematically used to evaluate outcomes (Armitage, Suter, Oelke, and Adair, 2009). Measuring the implementation and impact of integration remains a key challenge. Thus, integration can mean different things in different settings, including individual or programmatic working across professions, organisations, or sectors; how to study it is also not entirely well described.

### 1.2.2 Vertical and Horizontal Integration

Key concepts about direction of integration add dimension to the attempt to define and examine the impact of integration. *Vertical integration* refers to links across different levels of care, such as between acute hospital care and secondary care services (Gröne & Garcia-Barbero, 2001). Vertical integration involves connecting generalists and specialist healthcare professionals to provide care for specific conditions as part of patient pathways. Vertical integration is also defined as when agencies from different stages of a care pathway, or when payer and provider agencies, are combined into a single organisation. I will use the term vertical integration in the English sense, to describe care pathways between generalist and specialists for named conditions at different stages, or between payer and provider agencies (Thomas, 2008; Ramsay, Fulop, & Edwards, 2009). The term *horizontal integration* has been used in many fields, particularly business and economics; in healthcare it refers to building connections between similar levels of care, such as using multi-professional teams within the same sector, for example care provided by different services all within a primary or community-based care remit. Peer-based groups working across organisational boundaries or taking part in cross-sectoral work would also be examples of horizontal integration (Thomas, 2006b). Horizontal integration involves broad-based collaboration to improve overall health, whereas *comprehensive integration* includes a balance in both directions (WHO, 2008). For the present study, these definitions will be applied.



Comprehensive integration, or the capacity of a whole system to provide integrated care, to be proactive, and to develop a capacity for system redesign and implementation continues to be important for accomplishing any quality improvements going forward (Berwick, 2008). Indeed, understanding how clinical microsystems function within a larger healthcare system can affect the way leadership, teamwork, training, and integration are viewed as levers for improved patient safety and quality of services (Mohr & Batalden, 2002). Efforts to understand how microsystems function have been explored through studies of team working, knowledge exchange, and boundary spanning.

### **1.2.3 Teamworking in Healthcare**

Teamwork has been lauded as a means to improve patient-centred care by the World Health Organisation (2006, 2011), the NHS Improvement Plan (Department of Health, 2004) in the United Kingdom, the Pew Health Commission (O’Neil, 1998) and the Institute of Medicine (1999, 2001), in the United States, among other organisations. Consequently, there has been a variety of initiatives to promote inter-sectoral and inter-professional working; collaborative multi-professional team-working has become a major policy objective of successive governments and an international trend. These initiatives have included:

- the organisation of professionals into multi-disciplinary teams (e.g. community mental health teams);
- geographical co-location of services;
- shared geographical boundaries and/or merger of health and social care agencies;
- initiatives to promote a better understanding of others’ roles (e.g. inter-professional education); and
- the blurring of professional role boundaries in the interests of generic flexible working.

Teams that are “multidisciplinary” may in fact involve different meanings for inter-professional working arrangements, but often include a degree of integration and some extent of collective responsibility (Øvretveit, 1996). For patients, and providers,

connecting to different services can be experienced as facing an unacknowledged series of barriers or boundaries. Patients in most healthcare settings continue to interact typically with a variety of healthcare professionals representing many different disciplines but - despite such initiatives as those listed above – may not experience patient-centred care or coordinated teamwork. The leadership and climate of teams have been well-studied (Cooke, Kiekel, Salas, Stout, Bowers, et al. 2003; Isaksen & Lauer, 2002; Isaksen, 2007; Ouwens, Hulscher, Akkermans, Hermens, Grol et al, 2008; Øvretveit, 1997; 1999). Teamwork and collaboration have been studied in the hospital and surgical theatre contexts, where effective clinical teams have been shown to benefit patients' morbidity and mortality outcomes (Leonard, Graham, & Bonacum, 2004). However, most of healthcare happens outside of the hospital, in variable, complex and asynchronous pathways. Literally, and conceptually, teamwork is difficult to appreciate in the larger healthcare context, particularly in the community – though continuity and coordination are still necessary. Effective team process in primary care has been linked to high clarity of leadership (West, Borrill, Dawson, Brodbeck, Shapiro, Haward and 2003). Managing conflict and facilitating the process of teamwork is a frequent theme in the literature of teamwork in healthcare (Xyrichis & Lowton, 2008). Generally, evidence seems to imply that integration needs to be pursued at the macro, meso, and micro levels simultaneously, and with new ways of working, in order to overcome fragmentation (Ham & Curry, 2010).

#### **1.2.4 Knowledge Exchange**

Despite greater availability of information and wider use of technology, modern healthcare is not uniformly better. This may be related to how knowledge is gained – and transferred. Transitions between services are times when mistakes or misunderstandings can particularly happen. In a Commonwealth Fund international survey of sicker adults with complex care needs, it was found that care was poorly coordinated in many countries. Although the US and the UK fared well in 'time to see a specialist' (less than a month more than 80% of the time), for those patients without a

designated medical home, coordination gaps were experienced. In the US, 54% of patients, and in the UK 33% of patients, reported trouble with not having test results available during the consultation, doctors ordering repeat tests, and physicians failing to share pertinent medical history with each other (Schoen, Osborn, Squires, Doty, Pierson & Applebaum, 2011). Such disconnects appear to be a problem with both information transfer and knowledge transfer.

Knowledge, or *episteme* in Greek, has long been debated by philosophers - where does it come from and how do we recognise it as a concept? As opposed to information, the word knowledge describes more than just an objective possession that can be passed from one person to another. A knower has a cognitive capacity to develop, apply, and improve a resource, which can then be conferred to others, in another context, with meaning, as 'knowledge' (Newell, Robertson, Scarbrough, & Swan, 2009). Nonaka defines 'tacit knowledge' as what individuals hold personally but struggle to express, and 'explicit knowledge' as that which can be written out and articulated to others (Nonaka, 1994). In 1994, Gibbons, et al. theorised that whilst in past history knowledge was primarily created and formatted only by scientists within their academic disciplines, a more contemporary form of what the authors coined "Mode 2 knowledge" is now predominantly produced in context by the people who use and have accountability for applying that knowledge. Mode 2 knowledge, as Gibbons et al. (1994) conceptualised it, is socially distributed and applied with reflexivity, in a transdisciplinary manner. There has been wide reception of 'Mode 2' knowledge as being a useful conceptual framework for how scientific knowledge is typically shared in context, though detractors argue that there is little empirical validity for the claim that transdisciplinarity is a predominant mode for knowledge generation (Hessels & van Lente, 2008).

In a 2004 literature review of the concept of knowledge transfer, it was found that there was a broad inconsistency in how terms were used, particularly in innovation literature

in different disciplines. The authors of this meta-analysis posed that there seemed to be overreliance on the assumption that personal contact could improve knowledge exchange, and behavioural change in practitioners. Nevertheless, they concluded that people working in “bridging” roles or formally trained as “linking agents” (p. 698) might be needed to address the perceived in gaps between research findings and use of research in practice (Thompson, Estabrooks, & Degner, 2006).

For these reasons, learning how knowledge is effectively exchanged, between professions, organisations, and sectors remains a major concern, with the hope to improve the flow of the best, most current, and most pertinent information across perceived barriers. For this thesis, with a social constructivist stance, I will be assuming that learning is transdisciplinary, happens in the context of practice (as opposed to formal educational training), and that the situations and manner in which this knowledge transfers is how integration happens in practice.

#### **1.2.5 Boundaries in Healthcare**

In the healthcare context boundaries typically include those between different professional groups (e.g. doctors and nurses, generalist and specialists), as well as between organisations (e.g. acute trusts and community health service providers), and sectors (e.g. voluntary and social service sectors). Although it is believed that the process of change towards integration can be initiated at either the clinical, or systemic, levels (Contandriopoulos, Denis, Touati, Rodriguez, 2003), cross-boundary teamwork may be difficult to achieve due to non-collaborative philosophies within the NHS (Hibberd, 1998).

One accepted solution for solving continuity problems related to poor transfer of information across sectors has been to promote the use of well-evidenced guidelines to direct care. Evidence-based medicine can be defined as being when ‘all providers employ the same current concepts of best practice and the same evidence-based practice guidelines to minimise quality shortfalls and variations in care’ (Enthoven,

2009). However, efforts to implement shared guidelines based on the best evidence have not been uniformly accomplished, and awareness and uptake of new research findings has proved more difficult and impractical than logic assumes should be the case. The availability of good scientific evidence, and professional expertise, does not directly lead to implementation of updated and best practices. When good information is available – but not used - is surprisingly common. Grimshaw, Eccles, and Tetroe (2004) conducted a review of literature related to the implementation of evidence-based clinical guidelines into practice. They found that although it is possible improve the quality of care by changing professional behaviour (as reported in 86% of comparisons made in their review), the evidence base for how to implement such changes was weak. Interventions designed to translate research into practice, such as through the dissemination of informative materials were shown to have some effect, but the theoretical understanding of how these processes work were said to be unclear (Grimshaw, Eccles & Tetroe, 2004).

For the ambitions of policy makers to be realised, processes of knowledge exchange have to improve across professional, organisational and sectoral boundaries in healthcare. A recent review of current policy frameworks, for supporting evidence-based healthcare, specifically argues for greater attention to be paid to fostering “new boundary spanning mechanisms to encourage knowledge flow across professional boundaries” (p.847) and attention paid to the means by which different professions can share and debate their ‘knowledge’ and then embed it into local practice (Ferlie, Dopson, Fitzgerald, & Locock, 2009). Yet, in a review of the literature about knowledge transfer regarding health policy, it was reported there are still barriers to the rigorous implementation and evaluation of which strategies for knowledge exchange actually work and how researchers should evaluate the context of knowledge utilisation, particularly in light of the evidence based practice movement (Mitton, Adair, McKenzie, Patten & Perry, 2007).

While there is still great interest in bridging the gap between knowledge learned through research and knowledge used in practice, there has been some theoretical development in defining health care knowledge as non-linear. The premise of evidence-based health care has relied on bridging the epistemological dualism of research and practice. However, healthcare researchers have increasingly begun to use qualitative research methods to explore health care knowledge by thinking of it more as something that is integrative, and which moves as if in a 'rhizomic web' (p.61), making connections and associations in a interpersonal and 'micro-political' (p.63) world (Wood & Ferlie, 2003). As if in parallel, many policy recommendations and deliberations in healthcare policy-making are reliant, to a significant extent, upon calls for successful working between different professional groups, organisations, and sectors (Department of Health, 2008a).

#### **1.2.6 Boundary Spanning**

Boundary spanners are individuals (or groups) who have significant ties across organisational or sectoral boundaries. Boundary spanning is an action accomplished by individuals, groups, or organisations that are positioned as a link, bridge, conduit, or connection to other individuals, groups, or organisations. Coined by management sociologist James Thompson (1967), boundary spanning was originally conceptualised in the assessment of organisations, in environments of increasingly complex organisational structures, when more task-rich interactions were required. As he described, boundary-spanning units develop out of a rational or technical need to adapt to shifting complexity and to meet the expectations of interdependence between organisational units. Interdependence is difficult to coordinate at the point of all probable contacts. Theorists have described the importance of understanding how boundaries are spanned, particularly as a way of understanding how information about environmental change is perceived and communicated to decision makers (Leifer & Delbecq, 1978). The concept of boundary spanning has been shown to be important

and useful for the study of organisations as a manner of learning how to adapt in changing conditions.

Individuals who work in boundary spanning positions have been described as organisational liaisons, communication stars, and informational links (Adams, 1976, 1980; Thompson, 1967; Tushman 1977; Tushman & Scanlan, 1981a, 1981b). Professional expertise, specialised semantics, and diplomatic skill have also been described as important characteristics of the boundary spanner who works across sectors (Tushman & Scanlan, 1981a, 1981b; Williams, 2002). Furthermore, boundary spanners have been associated with the influential movement of knowledge and innovation across sectors (Abbott, 2007; Williams, 2002).

Boundary spanning as a concept is well studied in the management literature, particularly in the fields of information technology, sales, knowledge management, and research and development. Yet the processes through which boundary spanners can produce improved coordination and integration between different healthcare professions, organisations, and sectors, have not been determined. (See Chapter 2 for a more detailed review and synthesis of the literature). In the healthcare context, 'boundary spanning' interventions have been proposed as having the potential to promote the closer integration of services in the interests of quality of care. However, little is known about the contribution of boundary spanning individuals and processes in healthcare settings.

The concept of 'boundary spanning' potentially brings many insights relevant to contemporary challenges relating to the vertical and horizontal integration of healthcare services. Yet, despite a rich collection of theoretical and empirical studies from outside the healthcare sector, relatively little is known about how people and groups who function in boundary spanning positions in healthcare systems contribute to clinical outcomes and improved quality of care.

### 1.3 Purpose of the Present Study

The purpose of this study was to examine the impact of boundary spanning activities on the quality of patient care across professions, organisations, and sectors. The research questions were:

**Research Question 1:**

Does boundary spanning activity lead to knowledge exchange and, if so, what facilitates, or impedes, the sharing of knowledge across boundaries?

**Research Question 2:**

Does knowledge exchange lead to vertical and horizontal integration and, if so, how do boundary spanning activities contribute to improvements in the quality of patient care, particularly to provide more seamless services?

### 1.4 Context of this Thesis

A local primary care based project, the Westpark Initiative (WI), was created in early 2009 to improve connections between healthcare services in inner city London. The Initiative received funding from local and national sources to support staff training and development in their efforts to integrate services. University-based researchers were invited to examine the intervention, including myself.

This doctoral thesis was completed as part of a larger research project, which evaluated the Westpark Initiative. As a named co-investigator, I contributed to the writing of a successful submission of a competitive application to the National Institute of Health Research (NIHR) which was completed in December 2009 and accepted on 26 April 2010. I contributed to all aspects of the funded study from scoping through to completion, including setting up the overall study design, creating tools for the study, applying for ethical approval, engaging stakeholders, and completing all data collection and data analysis. I was the first named author of the final project report that was submitted to the funder on 18 August 2012 for peer review and is now in press (Nasir, et al., 2013). Whilst the NIHR research grant provided funding in support of data collection that contributed to the present study, the main purpose of the granted research was to evaluate the Westpark Initiative as an intervention to improve patient



care through better integration of services. The NIHR study included the secondary analysis of local and national data sets, which is not presented here. Although my inquiry and the NIHR study developed in a parallel manner, the research had different, but overlapping, trajectories.

This thesis differs from the NIHR study in two ways. One additional goal of the thesis was to contribute to the understanding of boundary spanning as a conceptual theory useful in healthcare settings. A second additional goal was to examine how knowledge is exchanged to improve horizontal and vertical integration in healthcare settings. As an embedded researcher, I personally collected all of the qualitative data, which contributed a highly in-depth perspective, provided for keen reflection, and permitted a greater level of examination as presented in this thesis. Dissemination of ideas related to both studies took two forms, including my reports of emerging findings for local stakeholders at two events in 2011, and peer reviewed abstracts presented at academic/professional conferences (see Appendix A).

### **1.5 Outline of the Thesis**

Following an overview of the empirical literature regarding boundary spanning in healthcare contexts in Chapter 2, which was not found to provide a robust analytical framework, the conceptual framework for the study of knowledge exchange and integration is described in Chapter 3. Nonaka's SECI (Socialisation → Externalisation → Combination → Internalisation) model was used to explore how tacit and explicit knowledge were exchanged, how innovative solutions surfaced, and how patient outcomes were defined by each of the four cases, and in combined dimensions. A detailed description of the local initiative, which provided the setting and context for the study, is in Chapter 4 followed by the methods in Chapter 5. Chapter 6 and Chapter 7 present the results of the four case studies, including the narrative descriptions of the four multidisciplinary teams at the core of the initiative, with activities described over time, vignettes to illustrate pertinent themes, and stakeholder perspectives of the local

interventions. In Chapter 8 the conceptual framework is applied to the case studies to identify enablers and barriers and analyse knowledge exchange in context and across cases. In Chapter 9 overall themes are discussed and in Chapter 10 conclusions and implications for integration and quality improvement in healthcare are presented, including recommendations for providers and future research. Throughout, all names of people and places have been changed to ensure anonymity.

## **CHAPTER 2 Literature Review**

### **2.1 Introduction**

This chapter reviews the literature relating to boundary spanning, including what is already known about how boundary spanning individuals and teams function. Section 2.2 presents a brief historical overview of the literature back to the seminal papers in boundary spanning theory, from the 1960s. Although there is a substantial boundary spanning literature related to business and firms (summarised in Section 2.2.), my systematic review in Section 2.3 focuses on the empirical study of boundary spanning in healthcare settings. My aim was to understand the concept of boundary spanning, identify applications of boundary spanning in healthcare, and synthesise that literature in order to identify key themes as a foundation for the present study. Section 2.3 presents the methods and results of the systematic literature search, and the results of a meta-ethnographic synthesis of the literature regarding boundary spanning in healthcare

### **2.2 Boundary Spanning in Early Management Studies**

'Boundary spanning' is a concept used widely in management literature with increasing clarity of terminology and a developing theoretical framework. Boundary spanning components and boundary spanning activities are concepts that were described in a seminal text from organisational theory, *Organisations in Action* (Thompson, 1967). Thompson explained that boundary-spanning units are established to adjust or adapt to increasingly complex structures, as a response to necessary subdivisions that result from the sheer volume of interactions in a task-oriented environment. For example, an organisation with a factory may have a technical core of producing certain devices, but to achieve desired outputs and further impact on the market, departments such as human resources, marketing, and sales must be expanded outside the core competency of the productive capacity. In this theory-building treatise, Thompson argued that the more an organisation's environment grows, the more it becomes complex, diverse, and/or unpredictable. The functional role, of a structure that can

cross boundaries, would then be created by management to monitor the increasing decentralization of the organisation (Burke, cited in Nicholson, 1995). Recognizing that “coordination is a central problem for the technical core of the organisation” (p.81), Thompson (1967) noted that boundary-spanning units would be troubled by “adjustment to constraints and contingencies not controlled by the organisation” (p.67). He further wrote that boundary-spanning units, although interdependent, would be judged by the “disappointments they cause for elements of the task environments” (Thompson, 1967, p.96). Though fulfilling a necessary position, boundary spanning as an act was not conceived to be serving in an easy position. This theme will be evident in the case studies presented later in this study.

‘Boundary Spanning’ continued to appear in the literature to describe the role of individuals who work in organisations but link across boundaries that divide workers. Such individuals have been described as serving as key nodes in information networks in theories introduced by Tushman (1977) who examined the flow of communication and innovation from the core of research and development (R&D) laboratories out to the external boundaries of the larger organisations in which such departments are based. The boundary spanning role has been described as dually serving to process information and provide external representation, as delineated from the role of the formal authority in an organisation (Aldrich & Herker, 1977).

In a review of the early literature in 1978, boundary spanning personnel were identified by names represented in the literature with similar meaning: ‘input transducers’, ‘linking pins’, ‘gatekeepers’, ‘unifiers’, ‘change agents’, ‘members of extra-organisational transaction structure’, ‘regulators’, ‘liaisons’, ‘planners’, ‘innovators’, or ‘marginal men’ (Leifer & Delbecq, 1978, p.42). Of 375 references, the authors at that time noted that the term ‘boundary spanner’ was used only once, in an unpublished manuscript, among the 28 references describing types of boundary spanning personnel cited at that time. Yet ‘boundary spanning activity’ is the very term they chose for the title of

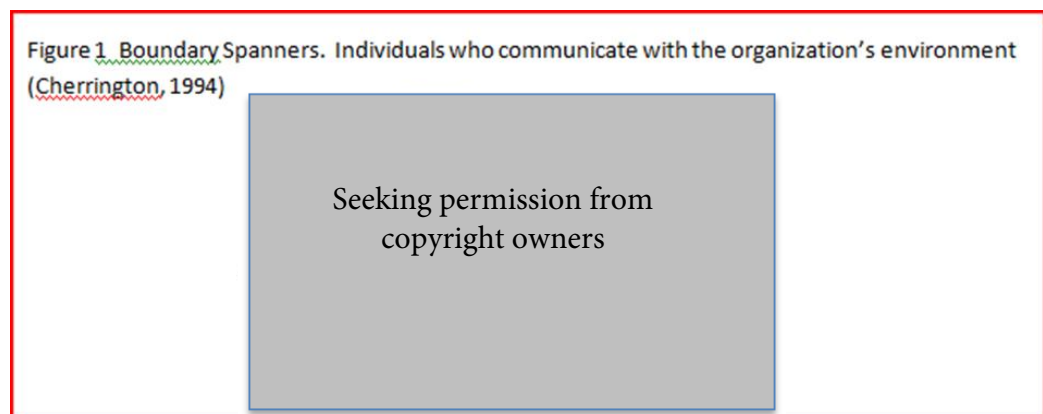
their journal article (Leifer & Delbecq, 1978). Tushman is widely credited with describing how “boundary roles” function as a link to the process of innovation in a system. Individuals in such a role serve as mediators, communicating across multiple interfaces in an organisation (Tushman, 1977). In describing ‘boundary spanning activities’, Tushman and Scanlan referred to boundary spanners as “internal communication stars” (Tushman & Scanlan, 1981b, p.290). Attempts to understand information transfer, especially with external orientation, was enhanced by connection to the concept of boundary spanning especially in describing organisations with laboratories and research and development departments working to create and disseminate new products (Tushman & Scanlan, 1981a, 1981b).

In the organisational management literature of the last few decades, individuals who work across sector boundaries have been identified in many fields, particularly in the industries of research and development, engineering, sales, and information technology. Such personnel have been referred to as serving in the role of “boundary spanner” highlighting their communicative and facilitating abilities to bridge multiple sectors within an organisation, and to form connections between the internal and external aspects of system (Tushman & Scanlan, 1981b). Those individuals who develop competence in both an internal and an external unit, and so gain access to internal sources of information and external networks for dissemination, then can serve as the “informational boundary spanner”. In a study of boundary spanners working on teams in the research and development (R&D) division of a medical instrument corporation, the values of competence and expertise were highlighted beyond a role that was merely about transmitting information (Tushman & Scanlan, 1981a).

As the term ‘boundary spanner’ began to appear in organisational behaviour textbooks, the term was also associated with a role in open systems theory. In this theory, an organisation interacts with its environment through individuals in boundary spanning roles who gather information about the environment and serve as representatives of

the organisation to the environment. For example, top executives may have wide reaching contact, interactions, and may travel to other organisations. Serving as specialised gatekeepers, these individuals are seen as controlling the flow of communication and may introduce new ideas to the organisation. Through this position at the edge of the organisation, boundary spanners may predict future changes by aiding an organisation in coping with its environment (Cherrington, 1994) (see Figure 1). This same textbook author describes boundary spanners as an example of a communication pattern in network analysis, as compared to other roles, for example gatekeepers, liaisons, and opinion leaders (Cherrington, 1994). Other management texts have gone on to define boundary spanners as encompassing all these communication roles.

**Figure 1      Boundary Spanners**



Following the early studies, the conceptual background of boundary spanning - and the empirical basis of its impact - has been further explored in the organisational studies and management literatures. There is much literature to describe the role of the boundary spanner and their multi-faceted positioning within an organisation. Sales people who communicate back and forth between scientists and consumers are an obvious example of personnel who move across sector lines. Managers are also clear examples of leaders who work between administrative leadership, staff, and customer services. Boundary spanners in teams have been said to serve in “ambassador activities” (p. 640) and provide “task coordinator activity” (p.641) at the team level

(Ancona & Caldwell, 1992), or been defined as “employees who operate on the periphery of an organisation” (Crosno, Rinaldo, Black, & Kelley, 2009, p. 296). Leaders have been in part characterised by their role in boundary spanning activities and their emotional intelligence, (Latendresse, 2006). The role of power and trust in relationships, and brokering of system exchanges has also been differentiated from boundary spanning (Fleming & Waguespack, 2007; Perrone, Zaheer, & McEvily, 2003). Boundary work in teams has been described by examining the interactions across boundaries in IT knowledge teams and other technological industries, especially in studies seeking to understand how projects are accomplished both by teams (Faraj & Yan, 2009; Lindgren, Andersson, Henfridsson, 2008; Ratcheva, 2008, 2009) and between organisations and partnerships (Noble & Jones, 2006). Success in research and development teams has been tied to vertical leaders who are skilled at boundary management and managing external relations (Pearce, 2004). Project leaders in the manufacturing sector have been found to be more effective boundary spanners when they have stronger network ties, and have the best impact on performance when they are able to ‘obtain political support’ and ‘scan for ideas.’ This tested model demonstrated that time spent in such boundary spanning activities affected the quality of relationships which in turn, influenced knowledge acquisition and the success of new products (Brion, Chauvet, Chollet & Mothe, 2012). Authors have discussed the consensus that integration drives superior performance, and that boundary spanners serve as source of innovation across functional areas (Hsu, Wang, Tzeng, 2007). However, the non-routine tasks of boundary spanners and the relationship to role stress and role overload have also been described in multiple studies (Crosno, et al., 2009; Friedman & Podolny, 1992; Marrone, Tesluk, & Carson, 2007; Mehra & Schenkel, 2008; Stamper & Johlke, 2003), including across samples of engineers and nurses (Bacharach, Bamberg & Conley, 1991).

Other reviews examining the links between external boundary activities, internal team processes and their interdependence have been explored in the UK public policy

landscape (Williams, 2002), and in the broader management literature relating to team boundary spanning (Joshi et al., 2008). For example, facilitating knowledge exchange across project boundaries has been described in multidisciplinary teams (Ratcheva, 2008) and in knowledge teams in software development (Faraj & Yan, 2009).

Another example is the use of 'translators' and 'knowledge brokers' (Hargadon & Sutton, 1997) to spread knowledge, capture good ideas, and act as go-betweens for participating organisations (Brown and Duguid, 1998). Despite the origin of role strain and difficulty being at the core of the boundary spanning functional definition, most of these studies considered that boundary spanning was necessary, and ideal for furthering organisational goals. Although perceived uncertainty as a source of role strain has been described in the context of boundary spanning, no studies in the management literature suggest avoiding the creation of boundary spanning roles.

Following these wider ranging studies, the term of boundary spanner began to appear in healthcare contexts. In their text *Organizing for Quality*, Bate, Mendel and Robert (2008) define boundary spanner roles as: "hybrid, dual, bridging, liaison, interlocutor, or boundary-spanning roles, such as clinical leader/manager, which allow for lateral contact and communication between different groups, and the linking of resources, people, and ideas around the Q & SI [sic] effort". (Bate, Mendel, Robert, 2008, p.179). The use of boundary spanner literature in healthcare literature is notably recent. Healthcare is a notoriously complex system, with many formal and informal sectors representing different stakeholders and professional disciplines. As a complex adaptive system, individuals in healthcare have complicated and enmeshed relationships (Begun, Zimmerman, & Dooley, 2003). Very many professionals serve as formal or informal boundary spanners; however, little has been described about this role in healthcare. In fact, in an extensive systematic review of diffusion of innovation literature in health service organisations, it was noted that empirical studies exploring the implied role of boundary spanner were "extremely sparse" (p.130) and none that fitted the



review criteria were identified (Greenhalgh, T., Bate, P., Peacock, R., Robert, G., Kyriakidou, O., et al., 2005).

In summary, boundary spanning concepts emerged from management theory to describe both individuals and departments or units that deal with increasing complexity. This liaison role has been described in the fields of organisational development, sales, engineering, information science, and technology. Only recently has the boundary spanning concept been applied to understanding the work of individuals and organisations in healthcare settings, with a paucity of empirical studies about the subject.

### **2.3 Boundary Spanners in Healthcare: A Meta-Ethnographic Synthesis**

The aim of my key literature search was to identify empirical research that has examined boundary spanning in healthcare. As there is no known in-depth accumulated knowledge of this concept applied in health care, my review formed an important foundation for the anticipated fieldwork and resultant case studies. To systematically review evidence to inform policy making in the health field, there are four basic approaches to synthesis: (1) narrative synthesis, such as a traditional literature review; (2) qualitative synthesis, which converts all evidence into a qualitative form, such as cross-case analysis or meta-ethnography; (3) quantitative synthesis, which converts all evidence into a quantitative form such as content analysis; and (4) Bayesian meta-analysis or decision analysis which converts evidence to weights or preferences (Mays, Pope, & Popay, 2005).

I chose to use a form of qualitative synthesis to understand boundary spanners in healthcare, because this approach is ideal to answer questions about management and policy, such as how to define a problem, which groups are affected, and to examine the possibility of successful implementation of interventions (Mays, Pope, & Popay, 2005, p.16). Narrative reviews collect and review accounts, however I was interested in also defining success factors for boundary spanning interventions. A new

method called the “meta-narrative” approach has been developed for use with diffusion of innovation literatures to expose systematically the contradictions and ambiguities in sets of literature (Greenhalgh, Robert, Macfarlane, Bate, Kyriakidou, Peacock, & 2005). Neither type of narrative or meta-narrative synthesis would help me answer the second research question about accomplishing integration in healthcare, though it was clear that a form of meta-analysis would be applicable to my questions of inquiry. Qualitative meta-synthesis is relatively new over the last few decades as a way to generate knowledge about the context of healthcare (Walsh & Downe, 2004). Meta-synthesis as a method for literature review amalgamates understanding in an interpretive, rather than aggregative manner although the application of rigour in analytical technique is still being explored (Walsh & Downe, 2004). One form of qualitative synthesis, meta-ethnography, is an ideal method to produce interpretations from a wide variety of quantitative and qualitative research findings, particularly about a complex concept (Greenhalgh & Peacock, 2005). Meta-ethnography is an inductive form of knowledge synthesis, which gathers explanations from qualitative studies using an interpretive, as opposed to aggregative, paradigm (Noblit & Hare, 1988).

For the purposes of the present literature synthesis about boundary spanning in healthcare, the empirical studies meeting determined inclusion criteria were analysed using a meta-ethnographical method for evidence synthesis. Driven by a goal of constructing an adequate explanation of experiences that are grounded in everyday life, meta-ethnography as a method is an effort to make systematic comparisons across a collection of qualitative findings. Meta-ethnography is particularly useful for developing novel theories by re-analysing the range of research findings reported (Mays, Pope & Popay, 2005).

The selection of articles and resultant synthesis for my literature review on boundary spanning in healthcare were undertaken using the seven iterative phases of meta-ethnography as outlined by Noblit & Hare (1988, p.26-29), and as shown in Figure 2.

**Figure 2      Seven Phases of Meta-Ethnography**

1. Getting started
2. Deciding what is relevant to the initial interest
3. Reading the studies
4. Determining how the studies are related
5. Translating the studies into one another
6. Synthesising translations
7. Expressing the synthesis

The use of meta-ethnography as a synthesis method, especially in the health literature, is still relatively under-represented (Mays, Pope, & Popay, 2005). Therefore, worked examples of meta-ethnographies presented in the health services literature were used to inform the steps of my synthesis (Atkins, Lewin, Smith, Engel, Fretheim & Volmink, 2008; Britten, Campbell, Pope, Donovan, Morgan & Pill, 2002).

In meta-ethnography, as further described by Pope, Mays and Popay (2007), the first three steps include identifying the topic of interest, carrying out a purposive search, and conducting repeated reading of the studies to emphasise iterative understanding. The fourth step, determining how the studies are related, is completed by compiling a list of key ideas, key concepts, and explanatory schema, in what Noblit and Hare term 'reciprocal translation' (1988, p.38). There are different ways to conduct the synthesis in meta-ethnography, including (1) synthesis through refutation, (2) synthesis inferred through 'line of argument', and (3) iterative synthesis through reciprocal translation (Pope, Mays & Popay, 2007, p.81). For my review of literature, I chose to use reciprocal translation by bringing key themes together through synthesis across all the papers, through re-readings and re-conceptualisations in the fifth, sixth and seventh meta-ethnographical phases to identify overall themes and subthemes related to the concept at hand, boundary spanning in healthcare. In the following sections, I present each of the phases, in detail.

### **2.3.1 Phase 1 – Getting Started**

The first step in my meta-ethnography was to clarify the object of interest in order to conduct a comprehensive and systematic search of the literature. Searching for

'boundary spanning' in Google Scholar on 20 January 2010 yielded around 307,000 citations, including a few key background articles in the first ten identified. A scoping Web of Science database search (see Table 1) was initially completed, as demonstrated in the following example:

**Table 1 Web of Science Search Strategy for 1st Sift**

<b>Web of Science [All databases] search on 19 January 2010:</b>		
<i>Search Terms</i>	<i>Total Hits</i>	<i>Articles identified</i>
bound* + span*	14,027	
boundar* + span*	8,152	
boundary + span*	6,327	
boundary + spanner	33	
→abstracts reviewed		4 fit inclusion criteria
 <u>Refined to select only literature:</u>		
'medical'; 'nursing'; 'psychological'	1,798	
- exclude 'biochemistry', 'biology'	1,286	
- exclude 'science & technology'	26	
→ abstracts reviewed		0 fit inclusion criteria
 only 'health care sciences & services'	 220	
→ abstracts reviewed		14 fit inclusion criteria

The topic of interest was clarified as being related to healthcare and it was determined that meta-ethnography would be an ideal method for synthesizing a collection of qualitative studies about the role of boundary spanning in healthcare. Through this scoping search, I noted that no synthesis on the concept of boundary spanning was found, including none specifically in the healthcare industry.

### **2.3.2 Phase 2 – Deciding What Is Relevant to the Initial Interest**

In the second step of meta-ethnography, four processes happen in parallel to iterative decision making: (1) defining the focus of the synthesis, (2) locating relevant studies (3) making decisions on inclusion, and (4) quality assessment (Atkins, Lewin, Smith, Engle, Fretheim, & Volmink, 2008, p.3).

First, the focus of the synthesis was defined to begin a search with purposive selection. Inclusion criteria were determined iteratively, as articles were initially identified through title scanning in the Web of Science database. To locate relevant studies about

boundary spanning, single and plural versions of the word 'boundary', and various forms of the verb 'to span', such as spanner or spanning, were combined; in free text searches this was termed: (boundar\*) combined with (span\*). In the larger databases this search initially yielded greater than 5000 articles, many related to mathematical, biological, or engineering conceptualizations unrelated to the sociological meaning intended. Search terms such as 'health' and 'healthcare' were also searched in combination to further focus and limit the selection. Based on the initial search demonstrated in Table 1, free text searches were done using the Boolean search: *boundar\* AND span\* AND healthcare* in all fields. To locate relevant studies using this Boolean search, a systematic approach was applied, including methodical electronic searches of the following six databases: Web of Knowledge, Web of Science, Google Scholar, Pubmed, CINAHL, and the digital library JSTOR.

To make inclusion decisions, in the preliminary sift, studies about boundary spanners in healthcare were identified first by title and abstract. In the second sift, the same articles were further selected if they were also empirical examinations of how boundary spanners are operationalised to integrate services in healthcare (see Figure 3 below). All studies that met all the inclusion criteria for both the first sift AND the second sift, were included in the initial literature review without initial regard for appraised study quality.

**Figure 3 Inclusion Criteria**

**FIRST SIFT (PRELIMINARY):**

- (1) **Relevance.** Has this paper explicitly studied "boundary spanning" by an individual or group in the healthcare sector?
- (2) **Specificity.** Was it part of the boundary spanners' formal or informal role(s) to facilitate the vertical and/or horizontal integration of service in order to improve patient care?

**SECOND SIFT:**

- (1) **Depth.** Does the paper go beyond a superficial description or commentary? Is it empirical? Is it a research, enquiry, investigation, or study that describes the role of boundary spanner(s) as applied to the vertical and/or horizontal integration of services?

(2) **Utility.** Does the paper contribute to the understanding of how the concept of boundary spanners can be operationalised in the healthcare sector in order to facilitate the vertical and/or horizontal integration of services?

These inclusion criteria were intentionally focused to yield empirical research specific to the intended topic of interest. Consequently, papers that explicitly described boundary spanning related to an individual's role in an organisation were included, particularly if this was part of the main theoretical framework of the article. Boundaries including those between teams, networks, professionals, sectors, and organisations in a healthcare setting were included. All selected literature had to fit the preliminary inclusion criteria and be directly related to both boundary spanning and healthcare. Only papers published in peer-reviewed English language journals were included.

Exclusion criteria excluded studies set in the information technology and software development industries or any non-healthcare setting. Research about teams with a specific boundary spanning remit were included; though research about multi-disciplinary teams was excluded in order to specifically identify how boundary spanning is conceptually different from teamwork. Research about physical or psychological boundaries, but not describing the act of bridging, or spanning different areas, was excluded, in order to identify specifically how 'boundary spanning' as an action or activity might be different from structural descriptions of sectors or departments within organisations. Studies particularly about collaboration or teamwork were also excluded to be distinctly clear about boundary spanning as an intentional conceptual framework.

The organisational studies literature, from as early as 1956 forward through 2012, was explicitly included by means of hand searching the following seven journals, determined by three experienced researchers: *Academy of Management Review*, *Administrative Science Quarterly*, *The Journal of Primary Care and Community Health*, *Organization Science*, *Organization Studies*, *Public Administration*, and *Social Science & Medicine* with no limitation by year. The following number of hits was returned (see Table 2).

**Table 2 Hand-searched Journal Results**

**Hand-Searched Journals**

in all fields: <i>boundar*</i> -AND- <i>span*</i> -AND- <i>healthcare</i>	1 <sup>st</sup> sift	2 <sup>nd</sup> sift
Academy of Management Review 1982-	3	0
Administrative Science Quarterly 1956-	63	3
Journal of Primary Care & Community Health 2010-	0	0
Organization Studies 1980-	10	0
Organization Science 1990-	5	0
Public Administration 1999-	22	0
Social Science & Medicine 1970-	83	1

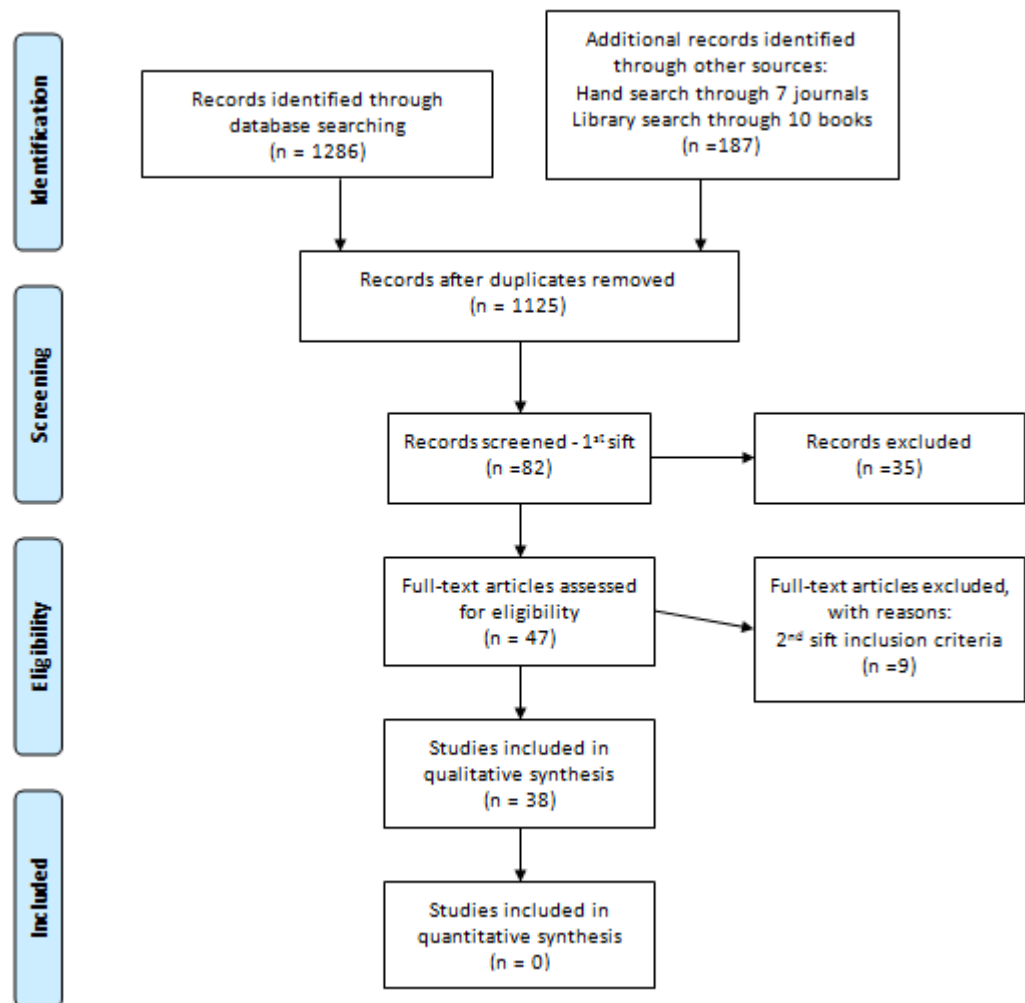
Reference scanning was used to identify historical articles that identified the concept of boundary spanner. The reference lists of selected articles were also scanned for relevant studies. Citation tracking was used to forward-track the key articles in the past literature, although this rarely yielded articles meeting the inclusion criteria. Snowballing and identification of studies through personal contact were also used.

Initially 1125 articles were identified through multiple formal search methods including: electronic searching of main databases including free text, index terms, and named author searches; hand searching of key journals; reference scanning; and citation tracking (Greenhalgh & Peacock, 2005). Inclusion criteria were used to assess 82 publications, and of these 35 were excluded. Forty-seven relevant full-text articles were identified after applying the second sift inclusion criteria.

A table was constructed to assess the relevant articles, and as they were read in-depth, each was critically appraised for quality and applicability to the synthesis. There is much debate, and little consensus, about the usefulness of rigid application of criteria to assess the quality of qualitative research (Atkins, et al., 2008; Dixon-Woods, Shaw, Agarwal, & Smith, 2004; Sandelowski & Barroso, 2002). For the purposes of this meta-ethnography, I did not apply strict regard for appraised quality in the identified studies, however, applicability and credibility were assessed using a simple checklist (Brown, 2010), and reinforced by the two sifts of the identified articles. Nine additional articles were excluded following critical appraisal through discussion with three research team members. See Figure 4 for a summary of how the results of the

searches from the various sources informed my overall findings, in standard PRISMA flow diagram format (Moher et al., 2009).

**Figure 4 Flow Diagram**



Despite all efforts to meticulously, and explicitly, define a search strategy, the majority of articles were identified outside of traditional database searches, which is consistent with research about search methods in qualitative reviews (Barroso et al., 2003) and systematic reviews (Greenhalgh & Peacock, 2005). Conventional ‘snowball’ tracking methods, such as references of references, as well as informal methods such as serendipitous discovery often yielded articles that were more pertinent.

Careful search records were kept, using reproducible strategies, in an effort to increase overall perspective on the search process. The search was completed in multiple



iterations across 24 months until the same articles resulted. The most current search in November 2012 identified six new studies about boundary spanning activity, including only one newly published article about boundary spanning in healthcare (Meyer, O'Brien-Pallas, Doran, Streiner, Ferguson-Paré & Duffield, 2011) which was added to the set of included articles. My search strategy, and a reliance on selected free text words, may have limited the findings. For example, studies set in long-term care that may not have been described as 'healthcare' would not have been identified, and in turn, this limitation may have affected the findings of the synthesis. However, it can be argued that the chosen focus did support a practicable number of studies, which did serve the main purpose of describing boundary spanners in healthcare. These steps and assumptions are consistent with the method of meta-ethnographic synthesis (Mays, Pope, & Popay, 2005). The characteristics of the remaining 38 studies that were synthesised in the meta-ethnography are described below.

### **2.3.3 Phase 3 – Reading the Studies and Characteristics of Papers**

Thirty-eight empirical articles published in a wide variety of journals were included in the review. In the third step of meta-ethnography, studies are read and reviewed again, for increased familiarity (Atkins et al., 2008; Noblit & Hare, 1988). In reading the individual studies, the concepts and interpretations identified become the raw data for the synthesis (Pope, Mays & Popay, 2007). Initially, I produced a table, to list all 38 articles alphabetically by author, including aims, setting, research methods, key findings, and limitations (see Appendix B). (Abbott, 2007; Alexander et al., 2008; Allen, 2009; Ankney & Curtin, 2002; Callister & Wall, 2001; Chattoo & Atkin, 2009; Clark, 1978; Currie et al., 2007; Currie et al., 2008; Currie & Suhomlinova, 2006; Drach-Zahavy, 2011; Ehrich, et al., 2006; Etz et al., 2008; Fennell & Alexander, 1987; Ferlie et al., 2005; Finn & Waring, 2006; French, 2005; Grudzinskas et al., 2005; Hara & Hew, 2007; Hardy et al., 2006; Hrebiniak & Alutto, 1973; Hunter et al., 2008; Kegler et al., 2007; Leifer & Huber, 1977; MacIntosh-Murray & Choo, 2005; Martin & Tipton, 2007; Martin, Finn & Currie, 2007; Martin, Currie & Finn., 2009; McDonald et al., 2009;

Merrell, 2000; Meyer et al., 2011; Richter et al., 2006; Rugkasa et al., 2007; Salhani & Coulter, 2009; Stern & Green, 2005; Thompson et al., 1996; Walker et al., 2009; Williams, 2002.).

Then, each of the studies were read for detailed characteristics. Of the included studies, 17 were from the United Kingdom (Abbott, 2007; Allen, 2009; Chattoo & Atkin, 2009; Currie et al., 2007; Currie et al., 2008; Currie & Suhomlinova, 2006; Ehrich, et al., 2006; Ferlie et al., 2005; Finn & Waring, 2006; French, 2005; Martin et al., 2007; Martin et al., 2009; McDonald et al., 2009; Merrell, 2000; Richter et al., 2006; Stern & Green, 2005; Williams, 2002.), 13 from the United States (Alexander et al., 2008; Ankney & Curtin, 2002; Callister & Wall, 2001; Clark, 1978; Etz et al., 2008; Fennell & Alexander, 1987; Grudzinskas et al., 2005; Hara & Hew, 2007; Hrebiniak & Alutto, 1973; Kegler et al., 2007; Leifer & Huber, 1977; Martin & Tipton, 2007; Thompson et al., 1996), four from Canada (Hardy et al., 2006; MacIntosh-Murray & Choo, 2005; Meyer et al., 2011; Salhani & Coulter, 2009), one from Australia (Walker et al., 2009), one from Ireland (Hunter et al., 2008), and one from Israel (Drach-Zahavy, 2011). Also included were two comparative case studies (one from the UK and the US (Martin & Tipton, 2007), and one from the UK and South Africa (Stern & Green, 2005).

Twenty-four studies (63.2%) used some form of qualitative method, of which thirteen had a case study design and five were specifically ethnographic in their approach (Finn & Waring, 2006; MacIntosh-Murray & Choo, 2005; Merrell, 2000; Salhani & Coulter, 2009; Stern & Green, 2005). Nine studies used only quantitative research methods (Alexander et al., 2008; Ankney & Curtin, 2002; Clark, 1978; Fennell & Alexander, 1987; Hrebiniak & Alutto, 1973; Leifer & Huber, 1977; Meyer et al., 2011; Richter et al., 2006; Thompson et al., 1996), of which eight used surveys or questionnaires (Alexander et al., 2008; Ankney & Curtin, 2002; Clark, 1978; Drach-Zahavy, 2011; Kegler et al., 2007; Leifer & Huber, 1977; Richter et al., 2006; Williams, 2002); the majority (seven) of the quantitative studies were from the US (Alexander et al., 2008;

Ankney & Curtin, 2002; Clark, 1978; Fennell & Alexander, 1987; Hrebiniak & Alutto, 1973; Leifer & Huber, 1977; Thompson et al., 1996). Five studies used a combination of qualitative and quantitative research methods (Callister & Wall, 2001; Drach-Zahavy, 2011; Kegler et al., 2007; Walker et al., 2009; Williams, 2002). Details of design and data collection methods are in the table presented in Appendix B. Half of the studies were published since 2007 (Abbott, 2007; Alexander et al., 2008; Allen, 2009; Chattoo & Atkin, 2009; Currie et al., 2007; Currie et al., 2008; Drach-Zahavy, 2011; Etz et al., 2008; Hara & Hew, 2007; 20 Hardy et al., 2006; Hunter et al., 2008; Kegler et al., 2007; Martin & Tipton, 2007; Martin et al., 2007; Martin et al., 2009; McDonald et al., 2009; Meyer et al., 2011; Rugkasa et al., 2007; Salhani & Coulter, 2009; Walker et al., 2009). The majority (n=33, 86.8%) of the studies were published since 2000, reflecting increasing and continued interest in the subject of boundary spanning in the health services literature (Abbott, 2007; Alexander et al., 2008; Allen, 2009; Ankney & Curtin, 2002; Callister & Wall, 2001; Chattoo & Atkin, 2009; Currie et al., 2007; Currie et al., 2008; Currie & Suhomlinova, 2006; Drach-Zahavy, 2011; Ehrich, et al., 2006; Etz et al., 2008; Ferlie et al., 2005; Finn & Waring, 2006; French, 2005; Grudzinskas et al., 2005; Hara & Hew, 2007; Hardy et al., 2006; Hunter et al., 2008; Kegler et al., 2007; MacIntosh-Murray & Choo, 2005; Martin & Tipton, 2007; 27 Martin et al., 2007; Martin et al., 2009; McDonald et al., 2009; Merrell, 2000; Meyer et al., 2011; Richter et al., 2006; Rugkasa et al., 2007; Salhani & Coulter, 2009; Stern & Green, 2005; Walker et al., 2009; Williams, 2002).

As it became clear that healthcare setting was not the only focus, and that further attention on the role of boundary spanning in integration of services would be the most pertinent for this synthesis, the studies were read for these additional elements in the second sift. Thus, in forming the first table of relevant studies, I also ascribed vertical and/or horizontal dimensions to the direction of integration as examined in each of the studies (see the last column of the table in Appendix B, and Table 3 below).

**Table 3 Characteristics of Empirical Studies (n = 38)**

	<b>HORIZONTAL</b>	<b>VERTICAL</b>
Number	24 (63%)	14 (37%)
Qualitative	13	11
Quantitative	7	2
Mixed method	4	1

Each article was also ascribed as relating to spanning in any of three boundaries: professional, sectoral and/or organisational. Details of direction of integration and the boundaries spanned in the included studies are shown in Table 4 below:

**Table 4 Direction of integration and boundaries spanned**

<b>Boundaries studied*:</b>	<b>Horizontal integration (n=24)</b>	<b>Vertical integration (n=14)</b>
Sectoral	14	3
Organisational	8	7
Professional	13	14

\* note: the total number of boundaries studied exceeds the total number of studies (n=38) as some studies explored more than one type of boundary spanning

Interface boundary and type of integration as ascribed to each article are represented in the last column in the literature review table (see Appendix B).

It is noted that clinical significance was not a point of emphasis in this set of studies. In some critical appraisal tools for qualitative studies, such as the CASP Qualitative Research Checklist, making a valuable contribution to patient care outcomes or transferability to other populations is highly ranked as a study quality criterion (Brown, 2010; Critical Appraisal Skills Programme, 2013). Since I had made the a priori decision in step 2 of the meta-ethnographical process to include all articles regardless of study quality or impact on patient care, clinical significance was not prioritised. The noted lack of impact of boundary spanning on clinical outcomes is a theme that is addressed in Section 2.4.4.

#### **2.3.4 Phase 4 – Determining How the Studies are Related: Reciprocal Translation**

At this stage in the meta-ethnography a list of explanatory ideas, key phrases, and recurring concepts are gathered to begin looking for themes across studies (Noblit & Hare, 1988; Pope, Mays & Popay, 2007). In phase 3, I had developed categories based on prior knowledge, such as level of integration and type of boundary crossed. Now in phase four, consistent with the meta-ethnographic method, I used thematic analysis to identify themes from the articles as primary data, and merged these themes into five categories:

- adaptability/flexibility is required at the boundary
- interpersonal/communication skills are crucial
- role identity is built on skill competency
- empowered voice relies on link of trust
- position of power sets level of diplomacy needed

To organise across the large number of papers in the thesis, I created a table for comparison, using Schutz's notion of ordered constructs. In his classic philosophical text, Schutz considers the "common-sense knowledge of everyday life" (p. 268) and how perspective is socialised (Schutz, 1954). The 'first order construct' of reality, Schutz describes as 'idealised' (p.269), and this is when we experience the world with the same perspective as the actors we observe (Schutz, 1954). The 'second order construct' is derived and what reviewers have come to associate with an author's understanding of the actor's experience (Atkins et al., 2008). The expected product at this stage of the synthesis, then, is a set of interpretations and explanations, which take these first and second orders of meaning to synthesise a resultant 'third order' interpretation to construct a new model about a phenomenon (Britten, Campbell, Pope, Donovan, Morgan & Pill, 2002; Pope, Mays & Popay, 2007). Whilst the effect of such categorisation remains uncertain, the practical application Schutz's 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> order constructs, nevertheless, has been typically used in published meta-ethnographies (Atkins et al., 2008), and I too found it useful for organising concepts across a large number of studies.

At this phase of the meta-ethnography, I made a table in an effort to translate studies into one another by generating comparisons between different studies, while still preserving the structure of relationships between concepts within any given study (see Appendix C). Participants' words from the original research would be a 'first order' construct, but are not used for my analysis, since rigorous representation of primary data could not be guaranteed. For this reason, I have not represented data in a 'first order' construct column. In the table presented in Appendix C, key study findings from the literature review table in Appendix B were condensed and translated in the table as a 'second order' column. In this column, the terminology presented by the study authors was maintained, in an effort to preserve conceptual understanding between studies.

At this phase in the synthesis process, it is possible to begin to see how concepts from the 38 studies related to each other. The substance of each study was synthesised into a new interpretation that contributed to the understanding to a larger discourse beyond any individual study, while also maintaining the reliability of inherent concepts (Noblit & Hare, 1988; Britten, Campbell, Pope, Donovan, Morgan & Pill, 2002). Key concepts and my interpretations were synthesised in the 'third order' column to elucidate themes across the set, and allowed for the development of a novel synthesis in the next phase.

### **2.3.5 Phase 5 – Translating Studies Into One Another**

'Reciprocal translation' is a form of synthesis that iteratively folds findings from different studies into each other, and captures key themes across different papers (Noblit & Hare, 1988). In determining how the studies relate to each other in the synthesis, and relate to the purpose of the review, reciprocal translation is a merging of metaphors and concepts in an iterative process that is not clearly laid out in the literature about the method (Atkins, et al., 2008). As an emergent and iterative method, the following phases of the meta-ethnography involved comparing the studies by translating

comparisons and differences in the concepts, then synthesizing and communicating these translations.

The resultant table (see Appendix C) extended from the initial literature table (see Appendix B) which was extensive, but further enabled comparisons and multiple conceptualizations across studies. Additionally, I added a 'memo' column to draw out and capture connections I noticed across boundary spanning themes, concepts from my emerging analysis (including the SECI conceptual framework explored in Chapter 3) and notes to myself through the analysis.

### **2.3.6 Phase 6 – Synthesising Translations**

At this stage, some meta-ethnographies may distil from the reciprocal translation to a higher order interpretation, called the 'refutational synthesis' or 'line-of-argument' (Noblit & Hare, 2008). Refutation synthesis attempts to refute earlier studies, and is rarely applied as a method – it was not appropriate to this synthesis (Pope, Mays, and Popay, 2007). I maintained a reciprocal translation and proceeded to a line of argument synthesis by juxtaposing secondary themes derived from interpretations (Atkins et al, 2008).

Due to the relatively large number of selected articles in this review, and the inclusion of both qualitative and quantitative research, the use of meta-ethnography was combined with variant methodological aspects of 'Critical Interpretive Synthesis (CIS)' as developed by Dixon-Woods et al. in their large synthesis study of access to healthcare for vulnerable populations. Key processes in CIS involve a dynamic and flexible search process that hedges toward purposive selection (Dixon-Woods, Agarwal, Jones, Young & Sutton, 2005). As consistent with the steps of the CIS method and the steps of meta-ethnography, I used continual reflexivity to capture emerging themes in the literature, with a critical orientation to conceptual findings. Although transparent steps and a clear audit trail for validating process have been presented here, due to the interpretative nature of the meta-ethnographic method,

there may be some who find limitations with such an approach. To this end, NVivo9 software was used systematically to organise themes within, and across, articles with a large resultant table for visual comparison, with codable and classifiable aspects (see Appendix C). Inclusion decisions and synthesis assumptions were continually discussed with the multidisciplinary research team, for iterative feedback and perspective on the processes used in the meta-ethnography.

### **2.3.7 Phase 7 – Expressing the Synthesis**

Overall, I found that the fourteen studies of vertical boundary spanning provided clear descriptions of how people at different levels of a healthcare system relate to each other but were weak on process and evidence-based patient outcomes (Abbott, 2007; Ankney & Curtin, 2002; Callister & Wall, 2001; Chattoo & Atkin, 2009; Currie et al., 2007; Currie et al., 2008; Currie & Suhomlinova, 2006; Ehrich, et al., 2006; Ferlie et al., 2005; French, 2005; Martin & Tipton, 2007; Martin et al., 2007; Martin et al., 2009; Thompson et al., 1996). All of these studies addressed spanning professional boundaries to some degree, which may reflect contemporary research interest in examining power relations between disciplines. Top-down policy initiatives for collaboration were not found to have led to better co-ordinated services. Pre-defined roles for clinical boundary spanners appeared to be challenging to accomplish in reality and social (personal and political) factors played a greater than anticipated part of the reasons for this. Political awareness and facilitation skills seemed important for inter- and intra-professional working, particularly in this vertical dimension. For individuals in high status positions, successful boundary spanning requires a willingness to work outside professional identity groups; for those in lower status positions, gaining and communicating professional competency may be more important. In summary, although inter-disciplinary and inter-organisational boundary spanning is a well-described challenge, there is little research to demonstrate how effective vertical integration is accomplished by implementing boundary spanning interventions.



Studies of horizontal integration appear to provide rather more positive support for boundary spanning interventions than those of vertical integration. More of the studies of horizontal integration examined the crossing of sectoral boundaries (Alexander et al., 2008; Clark, 1978; Drach-Zahavy, 2011; Etz et al., 2008; Grudzinskas et al., 2005; Hardy et al., 2006; Hrebiniak & Alutto, 1973; Hunter et al., 2008; Kegler et al., 2007; Leifer & Huber, 1977; Rugkasa et al., 2007; Stern & Green, 2005; Williams, 2002) - thirteen compared to only three in the vertical integration set of articles (Ankney & Curtin, 2002; Currie et al., 2007; Martin et al., 2007) - reflecting how non-healthcare sectors experience horizontal relationships with clinical services. Efforts in the horizontal integration of primary care services are commonly implemented as strategies to improve access for patients seeking particular medical services. Boundary spanning interventions in the form of online discussion forums, published resource guidelines, and complex pathway guidelines have the potential to improve joined-up working, particularly in community settings. However, sustaining integrated solutions relies on the flexibility, adaptability and continued reflection and insight by those who are facilitating the intended change, and the receptiveness to this change in the wider environment. For individual staff, achieving boundary status is associated with accomplishment - but also ambiguity. Professionals with enhanced expertise but in new boundary spanning posts, such as clinical nurse specialists (CNS), GPs with special interests (GPSIs), or dual specialists may not be readily accepted either socially or politically, making system-wide integration sluggish.

## **2.4 Discussion of Synthesis Findings**

The 38 empirical studies that met inclusion criteria were then analysed using the seven iterative steps of meta-ethnography for evidence synthesis. The resulting key themes were:

- the keen need for boundary spanners to possess a wide range of interpersonal and communication skills is not sufficient for accomplishing integration

- negotiating formal and informal boundary spanning roles may emphasise ambiguity and tension, and rely on communicating expertise and building trust
- recognising and responding to social and political influences on knowledge exchange processes is suggested for managers
- demonstrating evidence of the impact of boundary spanning on the quality of patient care has been underutilised

Each of these themes will be discussed in detail, in Sections 2.41 to 2.44 below.

#### **2.4.1 Boundary Spanning Theme: Communication and Interpersonal Skills**

As liaisons and diplomats, boundary spanners may serve to communicate new ideas across a divide. How that knowledge is shared, and whether or not it is adopted is a sign of their impact. In a study of health planning staff and board members it was found that effective performance as boundary spanners improved collaboration, (Clark, 1978). As a study of communication strategies, staff members and board members influenced each other by the extent to which they answered each other's questions; seeking information became a mark of a good board member. Open communication appeared to enable the ability to act on shared objectives. Knowing the staff views and agency routines increased the perception of board effectiveness.

Martin and Tipton (2007) compiled a typology of communication roles from a purposive sample of non-clinical, salaried patient advocates who, as boundary spanners, might review medical charts, facilitate selection of doctors for second opinions, or socialise with waiting family members. The roles were as follows: liaison, feedback-remediation, counselling and support, system monitor, trouble-shooter, investigator and group facilitator. Although this research suggested, theoretically, that as boundary spanners these advocates may serve as system change agents - particularly when responding to patient complaints - the descriptive nature of the research did not build empirical evidence for vertical integration. Similarly, Abbott (2007) found that in order to be effective, Nurse Consultants needed to be credible leaders, familiar with relevant policies and organisational structures, build and maintain effective relationships, and apply communication skills (including facilitation of conflict).

Using a postal survey and interviews in the UK public sector, Williams (2002) identified five perspectives relating to the role of individual boundary spanners - networker, innovator, cultural broker, collaborator, and leader - and explored how the factors of otherness and trust contributed to whether such individuals are “born and not bred” (p.112) with the disposition and personality of a boundary spanner. He concluded that research evidence was ‘weak on processes and effectiveness’ (p.121) and failed to explain the link between individual and team behaviour and outcomes. The study confirmed the image of individual boundary spanners as being able to work in non-hierarchical decision environments by brokering resources and connecting problems to solutions; however the link between competency and performance effectiveness was not explored (Williams, 2002). As in this example, many of the studies examined boundary spanning activities, and described the interpersonal and collaborative skills necessary to build trust and broker knowledge, but made no connection to actual patient outcomes in any replicable way.

Boundary spanning may represent individual traits of people working at the boundaries of organisations, but boundary spanning can also be accomplished by teams working to accomplish institutional goals. In a mixed methods study, three structural variables (team informational diversity, team boundedness, and extra team links) were used to understand how to increase inter-organisational boundary spanning in health promotion teams (Drach- Zahavy, 2011). Three types of boundary spanning were reported as being associated with team effectiveness: scouting, ambassadorial, and coordinating. The authors suggest that the most effective teams should maintain an open team configuration, invite experts, and change team composition over time (including part and full time members). In this way, increased scouting implied greater informational diversity, and greater inter-organisational team effectiveness, even in less bounded teams with more part-time members.

Tools, and processes, can serve as boundary spanning entities as well. Three studies examined how knowledge sharing was accomplished through boundary spanning methods (Hara & Hew, 2007; Etz, Cohen, Woolf, Holtrop, Ches et al, 2008; Clark, 1978). Hara and Hew observed an online community of practice for advanced practice nurses, finding that the non-competitive and asynchronous nature of online communication facilitated the improvement of current knowledge and validated best practice (Hara & Hew, 2007). A study of health behaviour change explored the use of referral guides along with support people external to the organisation, to implement linkages in the community. Connecting strategies, such as paper or electronic databases were developed to bridge primary care and community resources, especially for patient referrals. However, hurdles were discovered in both resource availability and accessibility to patients, and affordable infrastructure to support boundary spanning activities was needed. Often boundary spanning individuals were needed to fill in the gaps, and marshal the use of technology, where paradigm shifts in practices had not yet occurred (Etz, et al., 2008).

Whilst the keen need for boundary spanners to possess a wide range of communication and interpersonal skills is represented by this literature, it confirms what is inherent in the definition of the role of boundary spanning as coined by Thompson (1967) and explored in the management literatures since then. More than half of the studies emphasised the importance of interpersonal and communication skills, which included ten studies of vertical integration and seventeen of horizontal integration (see Appendix C). Where skill at building relationships and serving as a liaison was examined, additional issues of role ambiguity and power differentials greatly affected the level of diplomacy required for navigating uncertain boundaries. This synthesis shows that excellent communication and diplomatic skills are important, but not sufficient for accomplishing integration in healthcare.

#### **2.4.2 Boundary Spanning Theme: Formal and informal role negotiation**

The development of new professional roles to bridge treatment areas is a relatively recent innovation in the UK. With the development of these roles comes ambiguity in task definition and efforts to build professional credibility. Four studies specifically examined the development of individual boundary spanning roles: for nurse consultants (Abbott, 2007), for general practitioners with special interests GPSIs (Martin, Currie & Finn, 2009), for volunteers (Merrell, 2000), and for practice nurses (McDonald, Campbell & Lester, 2009). Of these studies, all described the challenge of gaining recognition as experts in the role, through gaining and communicating skill competence. Eighteen of the studies emphasised a connection between role identity and being perceived as competent or as an expert, including ten studies of vertical integration and eight of horizontal integration (see Appendix C).

Examining pilots that sought to train GPs in specialist genetics and cancer roles, it was found that recruiting for such hybrid roles was difficult due to the day-to-day work of GPs; sustainability of the project was thus a major concern (Martin, Currie & Finn, 2009). GPs with a special interest (GPSIs) were described as defining their legitimacy through relations with experts and through the motivation to extend clinical competency. However, between geneticists and GPs, the power of knowledge and jurisdiction ('turf') remained disputed in the professional hierarchy. Consensual divisions of labour may be backed by institutional goals, but at the micro-level, how roles were negotiated was not entirely clear. For example, a mutually agreeable role for the boundary spanner clinician was delimited (by the specialist) to be less clinical, and oriented toward a more educational role. Similarly, nurse consultants are described as struggling to negotiate their role as either autonomous expert, or process supporter, with a common experience of having difficulty identifying priorities (Abbott, 2007). An awareness of stakeholders' different priorities, social capital, and established relationships was important for developing collaborations across organisational and sectoral boundaries (Martin, Finn & Currie, 2007). Short-term economic incentives

were difficult to address with long-term preventative cost saving calculations (Martin, Finn & Currie, 2007). In these ways, politics was identified as an important aspect of role definition for boundary spanners. In these examples, beneficial evidence from putting a clinician in a boundary spanner role was difficult to collect, and the role was constantly re-negotiated within the context. When considering intentional efforts to vertically integrate services, the authors noted that co-located specialists and practitioners in hospitals had not only a supervisory relationship but also a more dialogical and informal relationship. Practitioners not located in the tertiary setting, but working in primary care, appeared to have more clinical-governance relationships with the hospital-based specialists. This latter relationship was considered time consuming for the geneticist who had to check the risk assessments done by practitioners who might have had 'inadequate' training (Martin, Currie & Finn, 2009, p.1195). Defining a boundary spanning role by task orientation and job description does not fully reveal the negotiations that happen on a daily basis.

Negotiating disciplinary boundaries between specialists and generalists may be mediated by disciplinary values (which may be semantic, historical, and practical and unrelated to patient need or disease trajectory) (Chatoo & Atkin, 2009). In a role study in palliative care - and despite policy guidelines to share care - covert and overt tensions between services were noted particularly in the practice of referrals (Chatoo & Atkin, 2009). Personal commitment and local organisational goals appeared to highlight dilemmas posed by uncertainty of prognosis, particularly in patients with heart failure. In these ways, boundary spanning managers and newly appointed link workers who were perceived to have less clinical knowledge had less ability to influence others in the vertical dimension, even if supported by policy initiatives, newly funded posts, or intentional clinical or managerial placement. Vertical integration may be suggested by policy, but professionals make individual decisions to collaborate, or move patients across boundaries, based on many other factors.

French (2005) describes four contextual factors (physical, social, political, and economic) which influence how work group participants use evidence to make policy decisions. Doctors, managers, and nurses working in different settings may have varying perspectives of what is needed for patient care. For example, in the social context of care, respondents reported using independent action, involvement in teaching, and direct challenge to influence the care decisions by medical staff. Subterfuge and adaptation were also described as covert strategies used to influence care patterns. In the wider context of care, researchers observed that influencing commissioners, adapting decisions, and informally 'trading' equipment, were other strategies used to manage economic constraints (French, 2005). In these ways, nurses used different strategies to close gaps in services. This research suggests that when boundary spanning is a functional activity, it may not always happen in an ideal or planned manner.

Time to engage in vertical integration activities was also a challenge for clinicians. Nurse Consultants working in boundary spanning positions were described as needing additional time to negotiate priorities and relationships, which limited the time they were available for patient care (Abbott, 2007), whereas cardiac surgeons reported that time constraints may contribute to inaccurate medical stories that are reported to newspapers (Ankney & Curtain, 2002). Negotiating boundaries is very time consuming, which may impede quality improvement or integration efforts, a theme that will be noted in the present case studies.

Boundary spanners have been placed as intentional links between programmes in an effort to create a seamless service for clients. For example, expanding the roles of mental health workers to bridge the 'handoffs' of patients between the courts and components of the mental health system was a solution explored in one case (Grudzinskas, Clayfield, Roy-Bujnowski, Fisher & Richardson, 2005). Attempts to build this innovative programme as a model were complicated by varying engagement of

different stakeholders, and complicated by a lack of client health insurance (in the US). An assessment to gauge interagency coordination was mentioned but not reported in detail. For mental health link workers it was found that whereas there was potential for these liaisons to improve communications between secondary education services and child and adolescent mental health services, staff were concerned that some increase in workload might result in the short term (Hunter, Playle, Sanchez, Cahill, & McGowan, 2008). Another study examined the changing roles of practice nurses in the primary healthcare setting in terms of their taking greater responsibility for the management of chronic disease, (McDonald, Campbell & Lester, 2009). The realignment of boundaries demarcating work previously done by GPs motivated nurses to increase their technical knowledge base to a less routine level of practice and to an increased level of professionalism, but raised some tensions in role definition.

Trust and communication, and power and conflict, were explored in a case study of multi-sectoral collaboration in the domain of the HIV/AIDS community (Hardy, Lawrence, & Phillips, 2006). Boundary spanners were recognised as being in 'dual roles': both collaborative partner and organisational representative, causing tensions to arise. Juggling the conversations between constituencies required a chain of conversations, which was framed as a creative process central to organizing; the tension was positive and necessary for seeking change. In this case study, the tenuous space between collaborators is described as a source of potential energy. This theme of 'potential energy' will be picked up by the conceptual framework introduced in Chapter 3.

The ability to build trust in the boundary spanning position was a theme identified in twelve studies (see Appendix C) which extends from the diplomatic skills needed when serving as a bridge across a boundary. Emphasising skill and competency in the role, was key to facing the challenges of the position of boundary spanner in more than half (eighteen) of the studies. Interestingly, most of the studies (23 of 38) explicitly



discussed how much adaptability or flexibility was required when serving in the boundary spanning role, which seemed to highlight the inherent tension experienced in ambiguous situations (see Appendix C).

Boundary spanning can be examined as strategies used to bridge gaps, not just as individuals serving in certain roles. Attempts to map out a mental health and safety care pathway also met challenges, due to complex assumptions about work arrangements, and attempts to connect the expectations of clinicians, managers, and service users (Allen, 2009). Negotiating the use of a guideline as a tool was unworkable when it was conceived of as an ideal document of standardization. To coordinate services, and accommodate to variation, the pathway needed to become more abstract in its scope. As a boundary object, the author describes the imprecision and looseness of the resulting pathway as an effective alignment and compromise between stakeholders. Creative solutions, such as collaboratively designed procedural guidelines, can resolve such tensions, whilst balancing the needs of standardization with diversity of purpose (Allen, 2009).

Two quantitative studies in the vertical dimension measured time spent (number of hours engaging) in boundary spanning functions as a positive characteristic of a supervisory position. Substance abuse programme directors, who were also treatment counsellors, were found to spend more time making community presentations, and liaising with monitoring organisations which the authors assume (but did not measure) may have improved treatment practices and political leverage (Alexander, Wells, Jiang, & Pollack, 2008). Front-line nurse managers with a larger number of direct report staff reported lower supervision satisfaction with highly transformational leadership, except when operational hours were extended. These boundary-spanning managers found more satisfaction in the “transformational leadership” role in which they perform charismatic and “relationship-oriented behaviours” within the organisation, than simply having more time with staff, though having more time was a factor (Meyer et al., 2011,

p.614). The leadership activities that characterise boundary spanning appear to mediate contextual pressures, but further studies would need to explore this issue more fully.

In attempts to understand how boundaries are negotiated, two studies used quantitative methods to evaluate the impact of the environment on boundary spanning behaviours (Leifer & Huber, 1977; Walker, Smith & Adam, 2009). In an early field study of work units in health and welfare organisations using questionnaires, Leifer & Huber (1977) found positive relationships between three variables: an 'organic management structure', frequency of boundary spanning activity (verbal and written interactions) and 'perceived environmental uncertainty'. They used a composite variable of 'organicness' in management structure by using six scored measures, including: extent of participation in strategic decisions, participation in work decisions, division of labour (specialisation), impersonality, formalisation and hierarchy of authority. Perceived environmental uncertainty (PEU) was measured by questionnaire items rating whether subjects knew what to expect of people in the organisation. Frequency of boundary spanning activity appeared to mediate environmental uncertainty and organisational structure. Organicness was strongly associated with frequent boundary spanning behaviour, environmental uncertainty was not. By examining the individual as the unit of analysis, this attempt to understand the different effects of organisational structure and uncertainty made strides in adding contextual factors to the analysis of boundary spanning activities, but limitations remain in measuring such linkages in context. Similarly, in their study of service providers working as boundary spanners in primary care partnerships in Australia, Walker et al. (2009) suggest that such individuals function to interpret environmental context to decision makers, mediating risk, and uncertainty. Service providers perceived less risk and uncertainty in the collaborative work, and so experienced unproblematic relationships based on trust. In contrast, organisational managers perceived more risks from breaches of trust, particularly due to political partnerships, which could cause more consequences and harmful

uncertainties. Competitive allocation of funds, and established system practices affected these experiences, placing an importance on an institutional environment, which supports trust across professions (Walker et al., 2009). Similar imbalances appear in the case studies presented in Chapter 6, and my analysis in Chapter 8 and Chapter 9 address such themes, in context, across cases.

#### **2.4.3 Boundary Spanning Theme: Social and political contextual influences on sharing knowledge**

Twelve, of the fourteen, studies of vertical exchanges specifically addressed the social and political contexts in which different disciplines function, particularly in the three studies which included Currie as an author, (Callister & Wall, 2001; Chattoo & Atkin, 2009; Currie et al., 2007; Currie et al., 2008; Currie & Suhomlinova, 2006; Ehrich, et al., 2006; Ferlie et al., 2005; French, 2005; Martin & Tipton, 2007; Martin et al., 2007; Martin et al., 2009; Thompson et al., 1996). These found that role and status seem to determine research uptake in professional groups, as opposed to managerial behaviour. Social and political relations between team members were identified as the medium for sharing knowledge in organisational change efforts (Currie, Finn & Martin, 2007). A case study of how knowledge was shared between two NHS teaching hospitals, district general hospitals, Primary Care Trusts, a Strategic Health Authority, and a university medical school took a neo-institutional organisational sociological perspective (Currie & Suhomlinova, 2006). This study suggested that knowledge sharing could be enabled within similar organisations but that this was much more problematic across different organisations and professional groups. In this study, hospital doctors were found to focus their knowledge sharing activity upon relationships with their peers within the hospital boundary and downplayed any contribution that GPs or commissioning managers might make to service development.

The hierarchy of professional exchanges across disciplinary boundaries, and the tendency of higher status clinicians to withhold, rather than share, knowledge was described in a study of the barriers to the spread of innovation in multi-professional

healthcare organisations in the UK (Ferlie, Fitzgerald, Wood & Hawkins, 2005). Specialists hold overt power in the hierarchy of organisations and strong professional identity is associated with more reluctance to share knowledge. These researchers found that strong uniprofessional communities of practice can block external input from other groups and retard innovation. A key theme in both the horizontal and vertical integration of services is therefore how credibility is inextricably linked to professional competency and expert knowledge (Ferlie, et al., 2005; MacIntosh-Murray & Choo, 2005; Martin, Currie, & Finn 2009).

Five ethnographic case studies examined the role of boundary spanners in horizontal integration (MacIntosh-Murray & Choo, 2005; Finn & Waring, 2006; Merrell, 2000; Salhani & Coulter, 2009; Stern & Green, 2005). The advantages of observing the socio-cultural and knowledge context of group work allowed these researchers to explore the factors, which impede or enhance collaboration, whether in the tertiary care hospital or community clinic. Recognizing the need for someone who sits outside of the usual routines - albeit temporarily - was noted in these studies. MacIntosh-Murray and Choo (2005) suggest that nursing staff - busy with prosaic tasks - may find that meetings and other forms of communication appear to be time consuming with little time for critical thinking to solve knowledge gaps. The rhetoric of accountability (and risk of consequences) can focus busy staff on tasks rather than quality improvement, and with managerialist discourses, actors may feel burdened or disempowered by a perceived need to put in extra effort to fix problems. A boundary spanning 'surrogate' was able to identify the information needs of others, and act as a knowledge translator, but could not fix routines or inherent competence problems in individuals (MacIntosh-Murray & Choo, 2005). In another study, addressing high workload demands in a complex environment was addressed by staffing flexible and transient teams in operating theatres; however, shared knowledge was at risk as was having a predictable knowledge composition of the teams (Finn & Waring, 2006). In this way, flexibility in coping with care delivery demands was found to undermine the acquisition

of knowledge; risks to safety risks were implied, but evidence was not gathered to support this. Needing to flexible is one manner of coping with uncertainty in boundary spanning positions, which can be caused by ambiguous role definition.

Ambiguity can affect people working in boundary areas (such as volunteers working in formal organisations) which may cause confusion for the paid staff working with them. 'Lay' workers may be asked to share knowledge and experience but not to give advice, which poses particular tension and potential for conflict (Merrell, 2000). Salhani and Coulter (2009) describe how nurses in a psychiatric hospital went 'went underground' with 'guerrilla action' to use a primary therapeutic nursing model to address biopsychosocial factors with patients, despite rejection from ward psychiatrists. Micro-politics and strategies to organise tasks amongst the nurses played a key factor in the description of inter-professional relationships in this study, as the 'elite nurses' intentionally expanded their jurisdictional boundaries through loyalties, logos and celebrations to oppose the dominant medical culture. In another study, for public stakeholders, working as 'boundary people' at the interface between community and statutory organisations was a prized end, suggesting that empowerment from the bottom up approach may have its place in system change, as stakeholders learned to negotiate shared agendas (Stern & Green, 2005). In the case study, incrementalism, and 'good enough' solutions were strategies used to build partnerships. Again, the theme of micro-politics will be reflected in the case studies presented in Chapter 6.

A NHS primary care-based study applied a survey-based social psychological framework to examine how boundary spanners' characteristics and behaviours related to the effectiveness with which dyads of groups jointly work together (Richter, West, Van Dick & Dawson, 2006). The study found that the productivity of group collaboration was predicted by boundary spanners who had frequent intergroup contact and high organisational identification. The authors suggest managerial implications (for example, promoting individual boundary spanners to boundary positions where strong ties to

their organisation can be used to overcome ineffective intergroup relations) but no interventions were tested. One case study presented in Chapter 6 tested this assumption with less than favourable results.

Boundary spanning strategies are used by organisations as well as individuals and groups. For hospitals in the US, membership in a larger organisational (multihospital) system increased that likelihood that bridging strategies would be used for outreach, likely due to corporate policies to reduce costs (Fennell & Alexander, 1987). Freestanding hospitals were less likely to seek external service linkages through planning groups or consortia. Confirming the idea that the hospital system is fragmented, this research suggested that hospitals do not have a uniform response to environmental pressures, and noted that regulatory pressure did not increase boundary spanning activity as expected. Retrenchment at the administrative level might be more likely as a response to vertical integration pressures, by increasing the size of boundary spanning governing boards rather than increasing technical capacity of those working at the boundaries (Fennell & Alexander, 1987). In another, older study of hospitals in the US healthcare system it was found that inpatient psychiatric departments increased the number of boundary spanning and what are termed 'buffering' (p.367) structures to ease environmental pressures as they increased in size (Hrebriniak & Alutto, 1973). Organisational performance was inversely related to department size as assessed by discharge rate, cost of discharge and cost per patient day. Public hospitals had more secure government funding and were more likely to increase the number of professional staff, whereas private hospitals were more likely to use non- or paraprofessional staff to reduce costs (Hrebriniak & Alutto, 1973). In this manner, increases in the number of staff appeared to be favoured over the introduction of new boundary spanning roles or departments. Overall, the boundary spanning literature at the organisation-organisation level is weak, though research related to mergers and acquisitions is beyond the scope of this review.

Callister & Wall (2001) in a mixed methods study from the United States specifically used conflict incidents to explore the interactions between managed care representatives and service providers. Organisational power and status differences were the independent variables, and dependent variables were behavioural responses of the managed care representatives and expressed negative emotions of providers. The researchers noted that individual boundary spanners with the most power (e.g. representatives of the larger managed care organisation) were less compromising and collaborative when negotiating with smaller organisations; and anger resulted when decisions were blocked by a lower status representative. Describing a 'double power asymmetry' the researchers also noted that the organisation that is larger and controls revenue streams can exert power over the medical doctor as provider; however this is reversed if the boundary spanner from the managed care organisation has a lower status (a clerk or a nurse) than the medical expertise of the provider. It is interesting to note that the boundary spanning post can be both problematic as well as a proposed solution; the boundary spanning representative in the middle of a conflict can experience stress and potential job turnover which the authors suggest might be addressed by putting more doctors in boundary spanning positions.

In a case study of successful local health partnerships, boundary spanning was accomplished both 'downwards' as well as 'across and upwards', meaning that community advisors had the responsibility for engaging multiple stakeholders, including programme recipients (Rugkasa, Shortt, & Boydell 2007). Momentum was maintained for on-going dialogue, due to the trust engendered through the enthusiasm and optimistic personality of the boundary spanner. Positive results were reported as '100% uptake of energy efficiency measures' and 'high levels of satisfaction', which were attributed to the increase in detailed local knowledge. As this study was about the problem of 'fuel poverty', the authors position the issue in the context of delivering public health and cross-organisational efforts to improve the health and well-being of the community. Thus, being a 'community-led' project was also held to be a positive

aspect to the success of the strategic planning partnerships that attempted horizontal integration (Rugkasa, Shortt, & Boydell 2007). In this way, the movement of knowledge across boundaries appears to be inextricable from the communicators of the process, and context is deeply interwoven with many aspects of a complex understanding of health care delivery.

Interestingly, accountability is important to consider, particularly in the healthcare arena, where the responsibility for patient care and safety is highly regarded. Ambiguous accountability for negotiated tasks and roles was highlighted in four studies, (Ehrich et al., 2006; French, 2005; MacIntosh-Murrah & Choo, 2005; Walker, Smith & Adam, 2009). Whilst forming partnerships has increasingly become a policy imperative, perceiving who ultimately has accountability for patient care in context, can challenge trust and cause tension, despite what might appear to be institutionally assigned top-down structure (French, 2005). More time spent in boundary spanning positions was found to increase the perception of risk (Walker, Smith & Adam, 2009). The rhetoric of accountability can create a wedge in power differentials, and detract from quality improvement efforts (MacIntosh-Murray & Choo, 2005). Ferlie et al., (2005) emphasise the tendency of strong disciplinary boundaries slowing the flow of knowledge to other disciplines, and may impede vertical integration. Thus, recognising and responding to social and political influences on knowledge exchange processes is suggested for managers, and for further studies.

#### **2.4.4 Demonstrating Evidence of Impact on Patient Care**

Finally, one theme that can be drawn from the meta-ethnographic synthesis, is by noting what is missing across the studies – evidence of impact on patient care quality.

Across all the studies (findings recorded in Appendix B), only one reported patient outcomes because of a boundary spanning initiative (Thompson, Diccion, Hensick & Armstrong, 1996). In this examination of a multi-professional attempt to design a quality and safety pathway, the purpose of the examined project was to improve patient



outcomes for those receiving peritoneal dialysis, and so clinical measures were reported. Thompson, Diccion, Hensick & Armstrong (1996) used key indicators (through retrospective chart audit) to determine the quality of peritoneal dialysis before and after a collaborative mapping project. Inpatient and ambulatory nursing representatives met to identify and change process flow-charting for equipment utilization (by patients and clinicians) across a service boundary. As an intentional quality improvement effort, patients who received care after the new jointly developed guidelines were implemented showed a decrease in transfer time between units, faster diagnosis, and treatment of complications; plans for interdisciplinary collaboration for changing practice responses for hypovolemia were also being monitored. In this study, how different professionals were brought together for discussions was not qualitatively examined, but the impact of the effort - a seamless and more effective patient pathway, was well illustrated. Otherwise, in the other 37 articles, outcomes were not related to patients. For example, in a study of community partnerships, public health and faith collaborations were designed in an effort to address health disparities, (Kegler, Kiser, & Hall, 2007). Boundary leaders were trained in methods of community system change at an educational institute, and pre/post assessments of knowledge and skills were gathered from each participant. Despite reporting success in leadership measures of renewed sense of faith and team accomplishments in planning programmes, no impact in health disparities could be reported, despite the intended health promotion goals. Introducing plans for change can be an indicator of the effect of boundary spanning interventions, but does not provide clear and direct evidence of an impact on health outcomes, as is often demanded by stakeholders and funders. In this manner, demonstrating evidence of the impact of boundary spanning on the quality of patient care has been vastly underutilised.

## **2.5 Synthesis Summary and Implications for the Present Study**

Despite the emergence of the concept of boundary spanners in the fields of behavioural psychology and organisational theory as long ago as the late-1960s, there

is still a paucity of empirical studies exploring the role of boundary spanning in healthcare systems. Only very limited evidence exists about how such explicit attempts to improve cross-boundary knowledge exchange have an effect upon the quality of healthcare. Relatively little is known about how people and groups who function in boundary spanning positions in healthcare systems contribute to improving the quality of care and clinical outcomes. Although a small number of studies of boundary spanning in the healthcare setting have been carried out, few have used rigorous empirical methods or have focused on the detailed processes by which such boundary spanning has improved the vertical and horizontal integration of healthcare services. None has been able to describe how boundary spanning directly influences the quality of patient care using measurable outcomes.

My synthesis of the literature shows that boundary spanning is often regarded as a potential solution to the challenge of service integration. I found a strong normative emphasis in the literature; the concept appeals as an 'obvious' solution and tends to be reified through individuals being identified as 'boundary spanners' who extend collaboration and integration in healthcare services. What is less clear, however, is how boundary spanners perform their role - or should perform this role - to improve the quality of care. Although, it is also important to note that some commentators outside of the literature in this synthesis (Huxham & Vangen, 2000a, 2000b; Hardy, 1994; Hardy & Phillips, 1998) perceive boundary spanning processes as problematic, not just failing in implementation, but hindering and even jeopardising intended facilitation and change. Researchers concluded that intentionally promoting professionals into boundary spanning roles may serve as a solution to bridge services, however this suggested intervention was not tested (Callister & Wall, 2001; Richter, et al., 2006). The present study explored such incongruities, as will be described in later chapters.

Boundary spanning as a concept is well described in the organisational studies literature and many insights from this literature review confirm previous findings in

other industries (i.e. broader insights do seem relevant to contemporary challenges relating to the vertical and horizontal integration of healthcare services). However, although it is accepted that boundary spanning contributes to knowledge transfer in the technology industry, sectoral, organisational, and professional boundaries in healthcare systems can present significant barriers to the exchange of knowledge (Currie & Suhomilina, 2006). These can undermine attempts to integrate healthcare systems, and ultimately efforts to improve quality and efficiency.

The literature synthesis presented in this chapter shows that - although the characteristics and experiences of individuals or groups in formal or informal boundary spanning roles have been studied in the healthcare context - relatively little attention has been paid to date to the core focus of my study: the *processes* by which 'boundary spanning' can support horizontal and vertical healthcare integration. Importantly, this review also demonstrated a lack of evidence of change in practice. Without a firm framework in place to describe boundary spanning processes in healthcare, it became important to identify a more structured conceptual framework on which to base the analysis, as will be presented in Chapter 3.

## **CHAPTER 3      Conceptual Framework**

### **3.1      Introduction**

To explore the micro-processes of complex boundary spanning activities in healthcare, I chose to complete an ethnographic study with mixed qualitative methods, which were also frequently used in the boundary spanning literature. Methods for this study will be presented in Chapter 5. Whilst I was able to elicit three main themes across the 38 studies in Chapter 2, a framework for analysis was not clearly elucidated from the literature review. Needed for the present study was a model of knowledge creation and exchange as a holistic framework to evaluate the quality improvement activities of four case studies of boundary spanning interventions in context – particularly to closely examine the movement of knowledge between professions, organisations, and sectors.

### **3.2      Knowledge Exchange and the SECI Model**

Knowledge management (KM) literature in the private, non-health sectors has long examined the difference between knowledge application and knowledge generation, and how these link to the development of new ideas, and, potentially, innovation. As a field of study, KM has been concerned with the conceptual process of how strategies, tools, and practices by management can affect an organisation (Newell, Robertson, Scarbrough & Swan, 2009). What processes in an organisation prompt creative thinking? How does information move through an organisation, and how do professionals learn to apply new ideas? To define the terms, *explicit* knowledge is based on evidence and is associated with expert practice in the clinical setting, with evidence-based medicine (EBM) and the production of acceptable guidelines for practice. By contrast, *tacit* knowledge is viewed as the kind of wisdom that experience brings. If both tacit and explicit forms of knowledge are to be shared across the boundaries of an organisation, then the relationships of people within the network and the mechanisms for idea exchange need to be better understood (Bate & Robert, 2003).

Newell et al. (2009, p.165-166) identify two theoretical approaches to knowledge work and the social networks in which boundary spanners function: 1) networks serve as *channels* through which knowledge flows, and 2) social networks serve as *communities* (emphasis theirs). In the first case, the network provides connectivity between individuals and organisations, and knowledge flows across different groups. In the second case, there is more emphasis on the shared practices and understandings amongst members of the community, putting the pin in shared learning. In this way, boundary spanners can be understood as having organisational impact, but also have entrepreneurial roles as brokers of knowledge. However, how emerging communities play a role in an organisation's ability to learn, and share knowledge for horizontal integration is still not well-understood (Newell, et al., 2009).

Twenty-seven of the reviewed studies examined knowledge exchange across single (e.g. profession –to-profession) disciplinary boundaries, thirteen at the horizontal level and fourteen at the level of vertical integration and (see Appendix C). Roughly the same number of studies examined knowledge exchange across multiple (e.g. between professions in different organisation and sectors) boundaries. Sixteen studies examined cross-organisational boundaries, nine in the horizontal dimension and seven in the vertical dimension; whereas seventeen studies examined spanning sectoral boundaries, thirteen in the horizontal dimension and four in the vertical dimension (see Appendix C). One notable exception studied barriers to the spread of innovation in multi-professional healthcare organisations in the UK, and found that strong uniprofessional communities of practice block external input from other groups and retard innovation (Ferlie, et al., 2005). Similarly, between professional boundaries, knowledge flows appeared one way - from hospital doctors to other professionals. In a study of the capacity for innovation in primary care, it was noted that top-down processes to ensure best practice, and bottom-up facilitation efforts both failed to accomplish integration or produce innovation (Thomas et al., 2005). Further US-based research confirms that professionals do not always contribute to the effective diffusion

of innovation in medical practice, leading to both over- and under-utilization of certain knowledge, which may be recent innovations in clinical practice (Adler & Kwon, 2009).

Boundary role persons, or boundary spanners, have been proposed as a means of overcoming such barriers. A further NHS primary care-based study, this time applying a survey-based social psychological framework, examined how boundary spanners' characteristics and behaviours related to the effectiveness with which dyads of groups jointly work together (Richter, et al., 2006). The study found that the productivity of group collaboration was predicted by boundary spanners who had frequent intergroup contact and high organisational identification. Other commentators have suggested that organisational forms like networks of healthcare professionals can cause fragmentation and power differentials that challenge work relationships (Currie, Finn & Martin, 2008). A recent study of knowledge sharing within NHS networks examined boundary spanning and found that managerialist and policy efforts towards structural change had limited effect on knowledge sharing. Rather, social and political relations between team members were identified as the medium for sharing knowledge in organisational change efforts (Currie, Finn, & Martin, 2007). Similarly, a study of the application of a diffusion of innovation framework for information systems research in NHS general medical practice, identified issues associated with professional cultures but facilitating conditions and individual roles were not examined in any depth (Wainwright & Waring, 2007). These studies suggest, as confirmed by the meta-ethnographic synthesis in Chapter 2, that knowledge sharing across boundaries is complicated, and the processes for moving knowledge is not well understood.

Outside of the healthcare literature, Ikujiro Nonaka has proposed that organisational knowledge creation progresses in a spiral model of continual dialogue between tacit and explicit knowledge (Nonaka, 1994). Nonaka also draws on the distinction between different types of knowledge, from his definitions: *explicit knowledge* consists of facts, rules, relationships and policies that can be faithfully codified in paper or electronic

form and shared without the need for discussion, whereas *tacit knowledge* is engrained in the analytical and conceptual understandings of individuals ('know what') and also embodied in their practical skills and expertise ('know how'). Tacit knowledge is seen as being uniquely personal and embodied, whereas shared experience and deep mutual trust facilitate the conversion and change towards the experience of a simultaneous rhythm and synchrony of action. Nonaka describes this model in the spiral movement of knowledge through four stages: Socialisation → Externalisation → Combination → Internalisation, also referred to as SECI, described below in greater detail.

### **3.2.1 Socialisation, Externalisation, Combination and Internalisation**

Exploring and experimenting with how to define problems, and discovering new solutions, removes individual limitations and intensifies interactions to expand the boundaries of knowledge. A knowledge outcome can include a justified belief in what is true as the team comes to a collective understanding of the new problems, different solutions, and diverse tasks, with which they are faced. This provides the team with an enhanced capacity to take action to improve problem-solving performance. Social practices then offer stability and routine to processes within the organisation. However, how knowledge conversation affects emerging social practices is not well understood (Nonaka & Von Krogh, 2009).

Nonaka describes four modes of knowledge conversation - socialisation, externalisation, combination, and internalisation (SECI) as shown in Figure 5.

**Figure 5 The socialisation, externalisation, combination and internalisation (SECI) model**



(Nonaka & Konno, 1998, Figure 1, p. 43)

As demonstrated in Figure 4, the two different types of knowledge are converted from one mode to another through these four different processes. Knowledge is created, and expands between individuals (i), groups (g) (or in these cases, teams) and organisations (o), in a continuous manner of knowledge conversion through the four-stage process represented by SECI, which has been tested empirically. Internalisation is not the final stage as the process is a continuous dynamic (Nonaka, 1994; Nonaka & Konno, 1998).

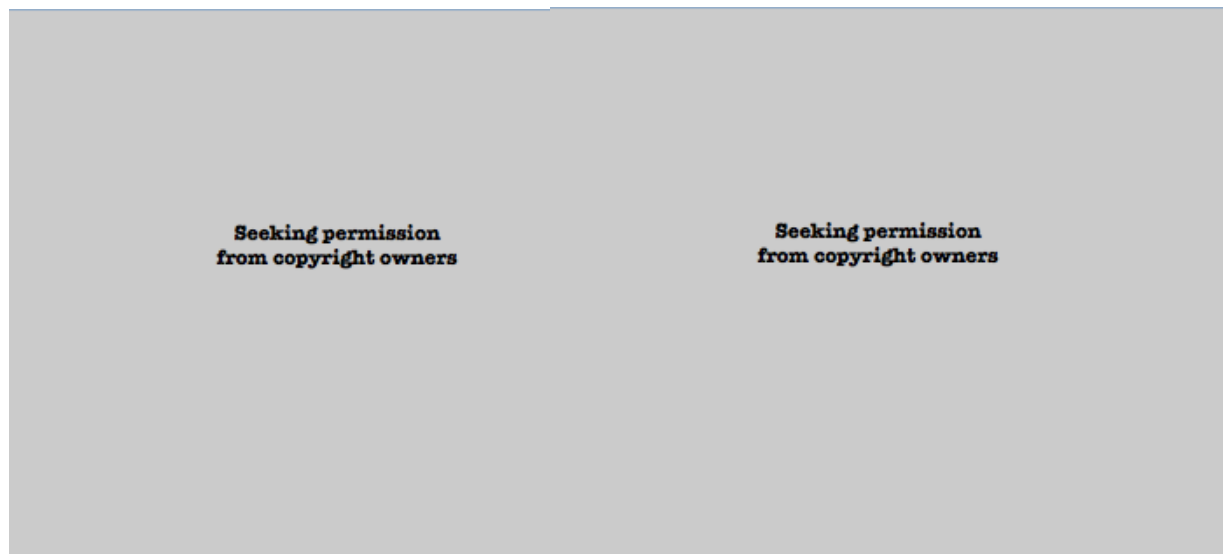
Nonaka has applied this model to cross-functional teams and their business activities, particularly explaining how boundaries are spanned both inside and outside the organisation. The shared context for dynamic knowledge creation is *ba* (building or place) which is an experience of interaction, not merely a physical space. Significantly, supporting the findings of my study, Nonaka and co-authors argue that leaders can aid or impede the knowledge conversion process across organisational layers and



boundaries (Nonaka, Toyama & Konno, 2000; Von Krogh, Nonaka & Rechsteiner, 2012; Von Krogh, Nonaka & Voelpel, 2006). The 'knowledge management system' within an organisation is a part of the context of this process.

Knowledge itself is boundary-less and intangible, can be both explicit and tacit, and take different forms or "assets" depending on the context. Knowledge is expressed and transmitted in different ways between individuals and groups, depending on context and specific time and place, and across interfaces in a dynamic manner (Nonaka & Konno, 1998; Nonaka et al., 2000) (see Figure 6).

**Figure 6 Four categories of knowledge assets**



(Nonaka et al, 2000)

### 3.2.2 Ba – Shared Context

For Nonaka and colleagues, key to the related questions of how teams transition between the four stages of SECI and move between different levels (individual, group and organisation) is the concept of '*ba*'. '*Ba*' is the energy and place where a shared context happens and where resources are concentrated so that knowledge can be created and used (Nonaka, Toyama & Konno, 2000; Nonaka & Konno, 1998) (see Figure 7). *Ba* is not understood to be a literal location for learning, but a conceptual

shared learning space – and it takes different forms and actions in each of the four SECI stages.

In Socialisation, *ba* is originated, and new ideas can surface. In Externalisation, dialoguing generates *ba*. It is at this stage that new products are made possible through experimentation, in a process which can be prompted (affirmed or negated) by team leaders. In Combination, *ba* is systemised through connecting actions. In Internalisation, *ba* is embodied and exercised, such that shared knowledge can be synthesised and shared beyond the organisation. At this point in the cycle, social justification will balance the risk of innovation and the cost-containment of knowledge creation. Socialisation catalyses the continuing process. Knowledge is converted through the four stage process, knowledge is generated and managed, and *intrapreneurship* is fostered (or not) in a multi-level overlapping dialectical spiral. (Nonaka, et al, 2000; Nonaka & Toyama, 2003; Von Krogh, et al., 2006).

**Figure 7      *Ba* as shared context in motion**



(Nonaka & Toyama, 2003, Figure 2, p.7)

Nonaka and colleagues defined the theoretical model of organisational knowledge creation in Japanese industries in an attempt to describe how to replicate successful innovation in any organisation. One metaphorical example they present, is how the home bread-making machine company, Matsushita, observed chefs at a hotel making

bread. Only by gathering experiential knowledge, were the developers able to observe the different motions needed to make excellent bread, in this case, not just kneading but also twisting (Nonaka & Takeuchi, 1995). Indeed Nonaka and colleagues recognise that realistic discussions are needed to test their theoretical assumptions (Nonaka & Von Krogh, 2009) and that the knowledge management field as a whole will benefit from the use of more research using methods from the social sciences (Nonaka & Peltokorpi, 2006).

Nonaka introduced a 'middle-up-down management' model to discuss how managers are positioned within the spiral of knowledge creation (1988; 1994). In this aspect of Nonaka's model, the team-oriented, and affiliated, firm supplies leaders who share knowledge in diverse forms to catalyse 'intrapreneurship' within the organisation. Middle managers then bridge the tacit knowledge of top management and frontline staff, incorporating this explicit knowledge into new products. Middle managers are termed 'knowledge engineers' (p.130) who are also the team leaders sitting at the strategic junction between vertical and horizontal flows of information. With a middle-up-down management model, creative sharing of knowledge is enabled with less institution-based regulation or personality dependent leadership (Nonaka, 1994). This model was tested using a knowledge creation questionnaire, and factor analysis and modelling, to examine knowledge conversion processes in 105 Japanese male middle managers (Nonaka, Byosiene, Borucki, & Konno, 1994). The combination mode was shown to be triggered by coordination activities between team members, and experimentation was found to be spurred by trial-and-error actions, but the study was very limited in scope. The application of the middle-up-down management model was explored further in the present case studies, as presented in Chapter 8 and Chapter 10.

### 3.3 Summary

Whereas much has been written about the sharing of knowledge through information systems, such as artificial intelligence and computer systems (Nonaka, Umemoto & Senoo, 1996), Nonaka's model emphasises the social aspects of how individuals and groups function in an organisation, and how these different types of knowledge (tacit and explicit) move across, or span boundaries. Social network analysis is one method to examine complex or adaptive processes which involve social activity, although the focus is on the relationships (Introcaso, 2005). Although social network analysis offers research design elements which allow for measuring the connections between actors (Knoke & Yang, 2008), due to the multitude of data points, and my interest in context, I was prompted to look for a more holistic framework, as presented by the SECI model.

Limitations of the SECI model have been addressed in the literature, particularly in a critique by Gourlay (2006) who questioned the empirical basis for Nonaka's case study work beginning in 1991 (Nonaka, 1991). Similarly, Gourlay & Nurse (2005) argue that the theoretical nature of the SECI mode of knowledge conversion is based on 'semantic information' studies which can be flawed by 'generous interpretation' and 'ambiguity'. Harsh (2009) argues that the Nonaka and Takeuchi SECI model is two-dimensional and thus treats knowledge only as an object or asset. His critique suggests that a third dimension of knowledge can be described in which knowledge is a function of time, which he terms 'reusability', necessary especially in software organisations, but this critique lacks any empirical evidence and does not address any particularities to the healthcare sector, as I present in this thesis.

I chose to apply SECI as a model of knowledge exchange to examine the work of multidisciplinary teams in the context of quality improvement. The application of the SECI model of the movement of organisational knowledge allowed for the nuanced analysis of multiple interactions in a complex healthcare system. As a dynamic model of knowledge creation in a holistic framework, I believe SECI is particularly useful for

analysing barriers that across which boundary spanners must reach. To my knowledge, no prior researchers have applied this model to the healthcare setting.

## **CHAPTER 4      Research Setting**

### **4.1      Introduction**

To answer the research questions and examine how boundary spanning leads to knowledge exchange, and how knowledge exchange leads to integration in healthcare services, I needed to find a setting in which to base the study. An existing local initiative provided the context from which case studies were selected. The Westpark Initiative (WI) was a community-based intervention implemented to improve cross-boundary collaboration in a local primary care trust. This initiative, as developed by community members in late 2009, was identified as a timely opportunity to examine boundary spanning activity within an active healthcare setting.

### **4.2      Study Setting – A Local Initiative for Change**

The present study took place in an area, called Westpark, within an inner city borough, Coxford, England. Composed of five wards, Westpark is highly diverse with a rapidly changing population, which is dominantly Asian (47.8%), particularly Punjabi. Though there are many Muslim and Hindu residents, the largest portion of the borough's population are Sikh (23.2%). According to the 2001 Census, the borough had a population of 300,948 residents, 43.4% of residents were born outside the UK, and 26% of the adults (aged 16-74 years) had no academic qualifications. In the borough as a whole, 27% of pupils receive free school meals, and many children do not speak English as a first language. Refugees and asylum seekers contribute to the ethnic diversity of the community, and often represent a disproportion of certain illnesses; for example, the borough has a tuberculosis notification rate which is six times the rate for all of England.

In 2005, 50% of the Westpark population were identified as BME (black and minority ethnic), 24% were South Asians, and 10% were African and Caribbean (Hollis, 2009). Overall, the area in which the study was conducted ranked high in all deprivation scores and was affected by many chronic diseases, reflected in higher than expected

mortality statistics. The Index of Multiple Deprivation (IMD) - a summary score measuring deprivation in relation to employment, income, education, skills and training, health and disability, barriers to housing and services, and living environment and crime - for the study area was 31.47, the highest in the borough. There was a high proportion (27.6%) of housing in the area, which was overcrowded and it had the highest scores for child poverty and deprivation affecting older people in the borough. One particular ward had the highest percentage of low birth weight babies (10%) born between 2002 and 2004 in the study area. The area under study also had four wards with the highest admission rates for depression in the borough and there were high rates of admission for psychosis. The area as a whole has the highest prevalence rate for diabetes in the borough (12.6% in males) which is also more common in people of South Asian origin.

The boundary spanning intervention studied was a local project that came to be known as the 'Westpark Initiative'. The idea was first suggested in early 2009 by a primary care trust commissioner and manager for older people, 'John', and designed by a clinical lead and Coxford GP, 'Chris' to build connections between community services to improve local health and well-being. In 2009, Chris believed that the Coxford Primary Care Trust had a "sustained political support and understanding for a new way of working, including stakeholders from local statutory organisations, and in partnership with voluntary sector agencies", as he described in a personal communication at the time. The Westpark Initiative was conceived by GP Chris to sit within the Coxford primary care trust (PCT) as a project designed to improve services specifically by increasing collaboration between general practitioners, community services, voluntary groups, and acute specialists in the Westpark area of London.

Clearly, the wider local context was - on one hand - a challenging one in which to implement this intervention. On the other hand, there was an extensive and vibrant network of community groups active in the locality that were keen to engage in projects

such as the Westpark Initiative. At the time of my study, the Westpark area was served by 26 GP practices (11 of which were single-handed), four health centres, nineteen pharmacies, eight dental practices and four opticians.

At a November 2009 local Stakeholder Workshop, stakeholders in the community and potential group leaders were invited to attend a strategic brainstorming session. With the help of a skilled facilitator, 'Richard', three key themes for improving patient care in their community were identified: dementia, anxiety and depression, and child and family services. By early 2010, Chris and John realised that diabetes care was also an important area of concern, and they recruited a fourth group leader to participate in the project.

Between July and November 2010, clusters of 5-6 general practices were identified to participate in pilot projects relating to the four priority areas. In these four cases, four boundary spanning multi-disciplinary teams worked to develop their own solutions to local problems with healthcare services. The team leaders identified the boundaries that would need to be crossed for better joined-up working, and envisioned goals to be attained. See Table 5, which illustrates how the four multi-disciplinary cases envisioned their own projects (words taken from WI documents).



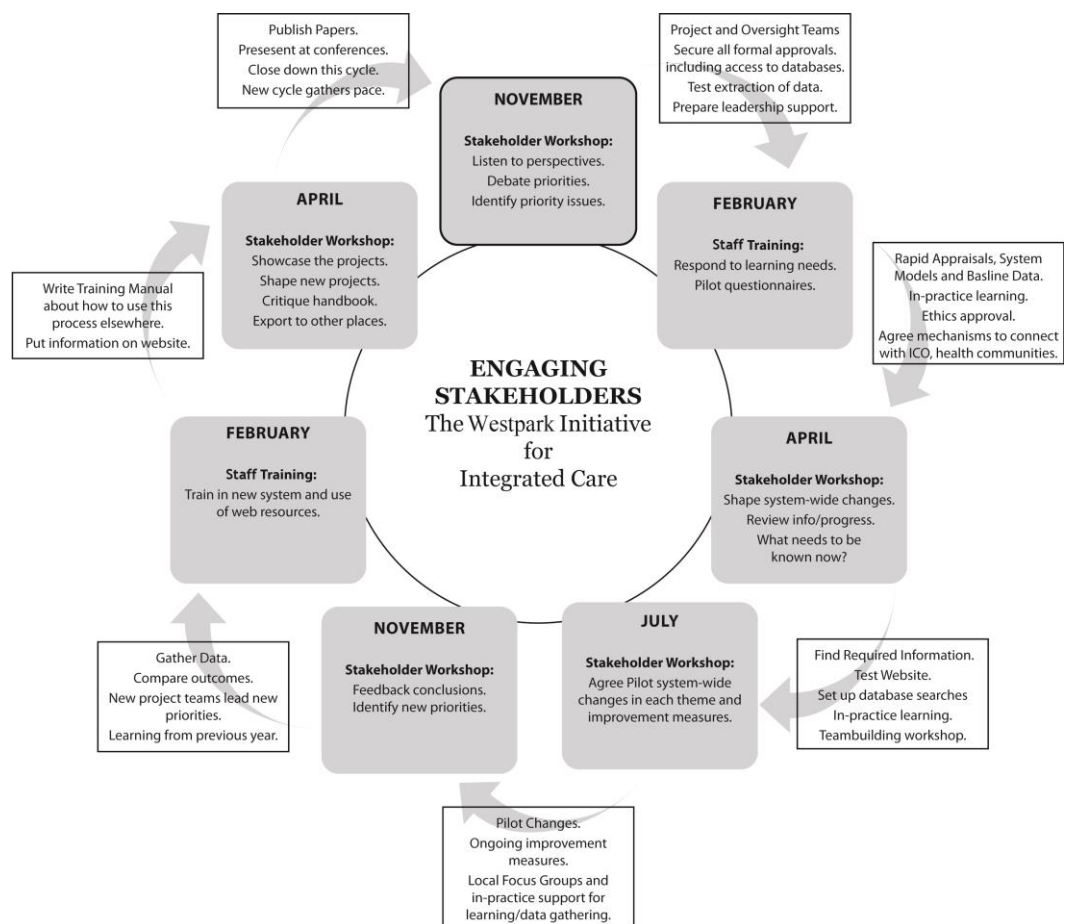
**Table 5 Westpark Initiative Objectives and Boundaries To Cross**

Case	Boundaries	Project Objectives	Specific Goals
<b>Anxiety &amp; Depression</b>	Primary Care & Mental Healthcare	Improving access to psychological therapies in people of Black & Minority Ethnic (BME) backgrounds	Treatment / helping people of BME backgrounds with depression and anxiety
<b>Dementia</b>	Primary Care & Social Care	Improving diagnosis	Identifying dementia at an early stage  Consider: Screening and early referral of patients with dementia, and pilot development of a community memory clinic
<b>Child &amp; Family Services (Community Collaboration)</b>	Primary Care & Community Care	Providing local support for children and families	Providing literature in GP surgeries about community resources  Consider: Referring from general practice to community and voluntary services, including school nurses and services for the overweight
<b>Diabetes</b>	Primary Care & Acute Care	Improving GP clinics; Redesigning Care pathways	Improving diabetic clinics  Consider: Pilot attachment of diabetic nurse specialist to a cluster of general practices, and training in running diabetic clinics

For Chris, the development of a network of leaders working across organisational and community boundaries, with an aim to facilitate knowledge exchange, was directly linked with a scheduled programme of ‘whole system’ stakeholder conferences. A predictable series of different types of meetings were scheduled across a year’s calendar. As Chris described it, the WI worked by providing a set of connected ‘learning spaces’ that allowed learning from one place to be considered in others.

Leadership teams were to 'move ideas forward' between educational staff workshops. Professionals were to work together to make changes across their sectors. Insights could be 'carried to other places by leadership teams' and 'debated at stakeholder workshops'. Chris designed the Westpark Initiative to have an annual cycle of service improvement for whole system change, including an annual learning cycle, to guide organisational change, together with community development. Figure 8 is my representation of how Chris described the Westpark Initiative; as consistent with ethnographic methods, Chris confirmed in mid-2010 that this figure represented his design of the WI.

**Figure 8 Westpark Initiative-Annual Cycles of Service Improvement 2009-11**



As evident in the cycle as conceived, stakeholder workshops would happen three times, in April, July, and November each year. A borough-wide staff training session would happen once a year, and in-practice learning sessions would happen every 2-3

months. The cycle would repeat every eighteen months. The design of this Initiative was that incremental change could affect whole systems of care, with four essential components, as clarified by Chris in an interview in September 2011 (see Figure 9).

**Figure 9 Four Essential Components of the Westpark Initiative**

**1. Annual cycle of coordinated reflection & action**

Different activities (e.g. rapid appraisals, data gathering and piloting changes) happened at different scheduled times of year. Practitioners, staff, and managers were invited to take part when it most suited their work, at time when they could gain mutual support from others who were doing the same, and adapt to multiple influences including the stakeholder workshops (three times yearly).

**2. Learning between clusters of practices**

GP practices were encouraged to compare data, share learning, and pilot changes in one of four projects.

**3. Cross boundary leadership teams**

Practice clusters were invited to take part annually in four modest improvement projects that require working across any of the four different organisational boundaries.

**4. Comparative data**

Data about quality and cost could be compared between practices. The goal was that practices would be able distinguish local and collective improvements.

The Westpark Initiative was an emergent process by which facilitated opportunities were provided for stakeholders to meet, learn together, and adapt their on-going work to a changing environment. Primary care is particularly complex and the membership of these teams, and the connected stakeholders, continued to change over the three years of the project, as will be described in Chapters 6, 7 and 8.

The opportunistic identification of the Westpark Initiative provided four nested case studies (identified with the four teams within the WI) which were particularly pertinent amidst the turbulent policy changes for general practices in the beginning of the study. In July 2010 the White Paper, *Equity and excellence: Liberating the NHS*, was released by the Department of Health. This policy had a tremendous contemporaneous impact on the structure of primary care in the UK, and in the Coxford primary care trust where Westpark is located. The present study was conveniently well positioned to identify success factors, and failing efforts for facilitated interventions in this real context,

despite ambiguities in roles, staff redundancies, and local political unease. In this manner, the case studies were in place and data collection had started as the environment began to undergo restructuring and a series of shifting priorities alongside an economic downturn. As the WI evolved over time, in context, I served as an embedded researcher, observing the development of the four teams, as four cases studies.

## **CHAPTER 5      Methods**

### **5.1      Introduction**

As the findings of the literature review in Chapter 2 illustrate, although the characteristics and experiences of individuals in formal or informal boundary spanning roles have been studied in the healthcare context, relatively little attention has been paid to the core focus of this study: the *processes* by which ‘boundary spanning’ can support horizontal and vertical healthcare integration through enabling knowledge exchange (as well as knowledge creation). In the light of the limitations of the boundary spanning literature, Nonaka’s SECI model was selected as a working heuristic to help analyse the findings in terms of the impact of a boundary spanning intervention upon knowledge exchange processes between different sectors, organisations and professions. The SECI model has a distinctive combination of structure and process, and particularly an emphasis on the importance of micro-interactions and the impact of these at the meso and macro levels, as explained in Chapter 3, and which was an important theme in the emerging findings, as will be presented in Chapter 8.

Given the SECI conceptual framework, and the purpose to explore the processes by which ‘boundary spanning’ can support horizontal and vertical healthcare integration through enabling knowledge exchange, in this chapter I consider the best methods for addressing the aims of this study, including the epistemological approach in Section 5.2, the design in Section 5.3, and the research instruments and methods in Section 5.4 and Section 5.5. Ethical approval was gained, as described in Section 5.6. Section 5.7 describes how data were managed.

### **5.2      Epistemological Approach**

My philosophy is based in social constructivism, with a core belief that reality is socially constructed in a dynamic manner. Knowledge is collaboratively assembled and meanings are relative, (Willig, 2008). My ontological stance is that our assumptions about the nature of the world are relativistic, not realistic. Our knowledge of the world is

fluid, and discovered in a subjective manner, putting an epistemological value on different interpretations and meanings (Speziale & Carpenter, 2007). Assuming that reality is truly apprehensible, and that a positivist framework would enable me to empirically describe all of what happens in the health care setting, seemed fundamentally impractical for answering the research questions as posed (Thomas, 2006a). The epistemological approach to this study was not positivist and the required methods indeed would not be quantitative. What is particularly useful about the social constructivist standpoint is that it allows for understanding complex contexts. Multiple interactions and adaptations may be created – but not predicted. To study the experience of how change happens – and how novelty arises – I believe that it is not important to know what to expect, but instead to try and observe what happens in each unique circumstance, each unique reality, and each small ‘t’ truth. As a study of quality improvement efforts, I was looking for how novel adaptations arise in complex contexts, including solutions to improve the quality of care.

A qualitative method was warranted for this study since the focus was on understanding and generating the meaning of the role of the boundary spanner within certain environments. Interpretivist studies rely on descriptions of lived experience to discover meaning within interactions in the social context; qualitative research offers the methods by which to capture such rich details (Noblit & Hare, 1988; Speziale & Carpenter, 2007)). A flexible research process that emphasises description and interpretation of multiple realities is useful for understanding social behaviour in a broad context. Moreover, the reflexive orientation of the researcher contributes to the depth of analysis (Green & Thorogood, 2009). A qualitative approach was used, with constructivist standpoint, which was intended to be emergent and iterative with an open-ended approach to interpretation, (Whitehead, 2005).

Qualitative research offers a number of different approaches to collecting data – including phenomenological, ethnographical, grounded theory, and action research, as

methods to consider (Speziale & Carpenter, 2007). An ethnographic stance was selected for this study, specifically to emphasise the observational aspect in a dynamic context, in the present tense. Phenomenology relies on extracting lived experiences to describe both theory and practice of a phenomenon – this method would not be useful for answering my inquiry about how integration is accomplished through collaboration in healthcare. First-hand experience is at the root of ethnography, using field-based research to gain knowledge of the world (Atkinson, Coffey, Delamont, Lofland & Lofland, 2011). Ethnography seeks to examine shared patterns of behaviour and beliefs, often from a cultural perspective and so requires familiarity with the organisational setting. Participant observation places the researcher in the ‘natural’ setting to investigate and gather data about social processes (Emerson, Fretz & Shaw, 2011). Flexibility when observing social activity in context is a feature common to grounded theory, action research, and ethnography. However, grounded theory focuses on generating theory through inductive and deductive processes, and action research focuses on an emancipatory process where the participants are equal to researchers – neither of these methods were ideal for understanding how boundary spanning process lead to integration in healthcare. Fundamental to ethnography is the focus on fieldwork located in the culture of interest, for the interpretation of patterns and their meaning in context. I selected ethnographic methods, including participant observation and interviews, as being the best way to collect data about the multiple perspectives of efforts to achieve better integration in healthcare. For this thesis, stemming from a constructivist philosophical stance, the strength of observational relevance was central to answering the two research questions, thus justifying the choice of a case study design, with ethnographic methods.

### 5.3 Design

This study used a longitudinal nested case study design to build and test theory related to boundary spanning, and to answer the research questions of how boundary spanning activities lead to integration and improvement of patient care quality. Given this design, considering the unit of analysis was at first complicated. The concept of interest was 'boundary spanning' – making connections across sections, organisations, and professional disciplines. When considering that there were boundaries, or barriers, and that these boundaries were spanned, or overcome, it appeared that the goal was to study the interfaces - the spaces in between and what happened therein. Yin (2009) writes that the desired case study should not be about an abstract hypothesis, but should examine conditions that exist in real-life. He cautions against misapplication of the method to studying abstractions. In this manner, selecting the unit of analysis suggests considering the *context* in which boundary spanning is what is to be examined. Thus, for this study, the unit of analysis was each of the boundary spanning teams in the Westpark Initiative, each considered as a case. Four nested case studies were examined within an investigative (and longitudinal) context, through which the more abstract aspects of boundary spanning were explored through positing additional study questions about activities related to knowledge exchange.

Case study research is an iterative process that includes both direct observation of events being studied and interviews of the people involved in the events. The design is appropriate to answering research questions inquiring as to why and how something happens, focusing on contemporary events, without requiring control of behavioural events. When a situation is technically distinctive and has more interesting variables than data points, then relying on multiple sources of evidence is appropriate (Yin, 2009). Case study allows researchers to address complexity, which although a noted technique for teaching physicians and nurses about human conditions, until very recently has not been appreciated in health organisational research. One recognised limitation of the case study design is the inability to make scientific generalisations.



Further, published case studies have been criticised for poor rigour or overly lengthy reports. However, the strength of the case study as an investigative design is its utility to deepen investigations of real phenomena in context (Yin, 2009). The benefit of a multiple-case, comparative case study design for this thesis included a pragmatic alignment with the ‘naturally’ occurring four teams in the Westpark Initiative. The ‘real life’ context presented a situation without a clear set of outcomes, and case study is a distinctive strategy to enable the researcher to describe and design the evaluation questions. Four case studies, one for each of four teams, nested in context of a locally designed project. To study how integration happened across professionals, organisations and sectors required examining the interactions of individuals within and between each of the four teams. The design was pragmatic, intentionally taking advantage of the presenting opportunity. To address issues of validity and reliability, a combination of research methods were used, as discussed in the next section.

#### **5.4 Data Collection Methods and Procedures**

To improve the quality of the case study design, efforts were made to address trustworthiness and credibility. Multiple sources of evidence were used to address construct validity, and internal validity was addressed by using explanation building and pattern matching during data analysis (explained later Section 5.7). Protocols were developed and followed to ensure reliability in the case study design.

I chose to use ethnography as a method best suited to study complex patterns behaviour of a group of individuals within a larger healthcare setting. Based in an interpretive philosophy, ethnography allows for discovering the meanings of social interactions. All health care practitioners have a *culture*, which a form of knowledge different from what an individual has as a form of personal knowledge. Culture is defined by being learned and shared; culture generates behaviour and interprets experiences. Besides these attributes, culture can be both explicit and tacit. Smaller groups within the larger society can be called *microcultures*, or very small subcultures

that have a particular cultural knowledge (McCurdy, Spradley & Shandy, 2004). With its roots in anthropology, ethnography is a method used to interpret cultural behaviour, and to understand how people relate to one another – ideal for examining processes at the interfaces of boundaries being spanned.

Ethnography as a research method is qualitative and so includes typical characteristics: (1) researcher as instrument, (2) fieldwork, and the (3) cyclic nature of data collection and analysis. According to Speziale & Carpenter (2007), there are three additional key characteristics of ethnographic research, including: (4) focus on culture, (5) cultural immersion, and (6) reflexivity. Consistent with these six characteristics, the present study, and my position as a participant observer within the local healthcare culture over many months benefitted from the strengths of this method, and also dealt with the tension of my dual role as a researcher and culture member (reflexively explored in Section 9.7). To examine the complex microculture of boundary spanners, within the larger healthcare society, the immersive standpoint of ethnography as a method was the best fit for my research questions.

As consistent with ethnographic methods, to address the research questions I used a mixed method approach longitudinally, across 34 months, for great length and depth of cultural focus and immersion. Mixed methods research has increasingly gained place in the field of health services, particularly because complexity in healthcare is difficult to address only through highly respected, but restrictive, randomised controlled trials (RCTs). As healthcare has its foundation in the hard sciences, the use of qualitative methods has entered the literature only in the last two decades, and continues to work to gain academic acceptance through publication. Widely suggested, but difficult to accomplish due to complexity, mixed method research is commonly used in other fields but still being developed in healthcare research (Borken, 2004). One study examined health services research (HSR) funded by a research commissioner in England between 1994 and 2004. Of 647 HSR studies, only 119 (18%) were classified as mixed

methods studies. Of these mixed method studies, interviews with the researchers demonstrated that motivation to obtain funding was a strategic rationale for choosing mixed method designs, as well as the sense that quantitative studies were insufficient for the context of healthcare. However, the most common form of mixed methods design reported was limited to RCTs combined with qualitative methods in a single context (O’Cathain, Murphy, & Nicholl, 2007b). These same authors examined the quality of the HSR studies utilizing mixed method designs and concluded that the qualitative elements should be better described, justified, and integrated into the overall findings. (O’Cathain et al., 2007a; 2008). As a multiple-case study design, with mixed methods, the present study was ambitious and challenging, though intentionally responsive to the health care workers being studied in context. Chapters 6 and 7 present thorough descriptions of the observations, framed in time and narrative, to address the limitations of mixed methods research and to integrate the overall findings.

Participant observation, historical document review, semi-structured interviews, participant (staff) research diaries, and patient/ focus groups were conducted. Qualitative fieldwork methods were combined to provide in-depth data, in a continuous process of observing, reviewing, analysing, and returning to the field (Speziale & Carpenter, 2007). Interview guides, diaries, and focus group guides were specially constructed for the purposes of this research, and each was piloted before data collection. As the tools for this study were edited and piloted, more clarity was ascribed to the composite aspects of what it means to span boundaries (see Table 6).

**Table 6 Summary of Data Collection Methods**

<b>Method</b>	<b>Research Question 1 Boundary Spanning and Knowledge Exchange</b>	<b>Research Question 2 Knowledge Exchange, Integration and Improvement of Patient Care</b>
<b>Participant Observation</b>	Observe form of boundary spanning and knowledge exchange activities	Observe for signs of vertical and horizontal integration
<b>Historical Documents</b>	Assess planned methods for boundary spanning Assess achievement of knowledge exchange goals by case	Review attendees at events for representation of profession, organisation, and sector Assess impact of boundary spanning activities on patients by local measures
<b>Interview staff</b>	Qualify facilitators and barriers to knowledge exchange	Qualify types of perceived integration and impact on practitioners and patients
<b>Online Serial Diaries staff</b>	Qualify facilitators and barriers to knowledge exchange	Qualify types of perceived integration and impact on practitioners and patients
<b>Focus Groups patients</b>	Qualify facilitators and barriers to knowledge exchange related to planned activities	Assess impact of boundary spanning activities on patients

#### 5.4.1 Participant Observation

Participant observations took place at planned stakeholder events (one every 3-4 months). Additional meetings were observed as they arose. Action learning sets and workshops were held regularly by the Westpark Initiative facilitator, especially in 2010, and these were also observed to build further theoretical understanding. In total, seven stakeholder events were observed and additional observations included: 4 master classes and 10 PCT-wide meetings that overlapped the WI; 37 planning, administrative and other sessions related to the WI (attended by the WI facilitator, leaders, and/or team members); other events hosted by the WI including 8 staff training events related to disease management topics, and 6 days at two annual residential retreats in 2010 and 2011. I personally completed a total of 361 hours of observation with written field notes from the scoping phase starting in late 2009 through the dissemination of results

in mid-2012 (in 2010 observations lasted 128.5 hours; in 2011 observations lasted 203 hours; in 2012 observations lasted 29.5 hours (see Appendix E for a detailed log).

Group methods of organisational analysis allow the study of context, where people meet and talk within a shared social reality. Because individuals overlap in their activity and their perceptions, there is a working assumption that social realities are 'continuously in the making' (Steyaert & Bouwen, 2004, p.141). With an exploratory purpose, for this research I engaged in observing the Westpark Initiative teams in their 'natural' (as opposed to 'created') settings. As a group method of research, being able to observe individuals interacting with each other also allowed me to observe the wide variety of boundary spanning behaviours, not just the intentional aspects of collaboration designed within meeting agendas.

Scoping introductions were undertaken primarily through the relevant formal and informal networks through the community collaborators in the research setting. I began to make these connections in early 2009 many months prior to the formal start of data collection in order to identify relevant stakeholders and build rapport. The purpose of the observation was to identify examples of knowledge exchange and collaborative working between individuals from different parts of the health service, or to note opportunities for these activities that were missed. Thus, the focus of observation was on interactions and activities. As a consistent observer, researcher interaction and feedback were invited from participants, lending an "embedded" style to the field study.

Written field notes were collected in a reflective style as informed by ethnographic principles and captured four categories of material on each page:

- explicit activities were noted with stated agenda items matched with times, physical room layout, number of people, and roles of attendees and topic being discussed
- observations of mood, tone, and points of perceived tension were noted in a column parallel to the agenda

- boundary spanning themes, emerging concepts and fieldworker insights were noted in coloured ink making connections across the two main columns
- a 'To Do' list was included at the bottom of each page to capture ideas of further people to interview, or concepts to pursue at a later date.

This field note style allowed for multiple insights to develop and be gathered during lengthy and often complex meetings and interactions. As Tushman (1974) noted of the study of organisations, exploratory fieldwork requires the accumulation of a necessary background, and flexibility to make frequent adjustment to provisional hypotheses and consequent data collection. Notes were gathered during meetings and impressions noted afterward. Telephone calls and informal interactions were also written up contemporaneously in field notebooks. Analysis began during the fieldwork as qualitative data were regularly discussed with my research advisors so as to shape on-going data collection and allow for refined directions of inquiry. My field notes and impressions as the embedded researcher were reviewed in monthly oversight meetings with my research advisors, and iteratively reviewed during the analysis phase of the study.

#### **5.4.2 Historical Documents**

Documents, handouts, and emails created by staff were collected and reviewed to detect care quality improvements and patient outcomes resulting from boundary spanning interventions in the field. Each of the four Westpark Initiative teams identified their own goals and suggested outcome measures they would pursue, as described in Chapter 6. During the familiarization phase, I started to examine project documents and believed that an additional conglomerate or proxy measure of boundary spanning processes would need to be constructed in addition to information gathered by the participants themselves. Anticipating the challenge in tracking interactions amongst members of the four cases and the larger project over time – it was clear there were many individual units of interaction. In addition, pre-selecting the outcome measures proved to be challenging early in the study, since staff were instead used to monitoring patient behaviour and/or activity rather than systems improvement criteria. I suspected

that boundary spanning had additional conceptual aspects that would need vetting, including elements such as trust, vision, creativity, and adaptability in an individual role or organisational exchange. Early on, it was clear that new and different types of questions and measures would need to be developed during the piloting phase over the first 6-10 months. Additional literature review and discussions with participants and advisors through the scoping phase elucidated ways the present study might ascribe quality improvements in patient care to boundary spanning.

Progress towards stated goals in the teams were tracked via project documentation throughout the fieldwork period (July 2010 to early 2012). I was included in several email listservs which included invitations to staff in Westpark and Coxford to a variety of events led by the PCT. Relevant historical documents from 2009 forward - such as presentations, reports, and planning paperwork - were made available to me and are included in my analysis.

#### **5.4.3 Interviews**

Semi-structured, recorded interviews were conducted with individuals identified as boundary spanners involved with the Westpark Initiative. Interviews were conducted in parallel to observational fieldwork, to compare what was being provided to support cross-boundary working. Selection of participants was via a '360-degree' approach, for systematic coverage of the whole system (Ward, 1997). This method for gathering feedback is often associated with annual appraisals for staff, by seeking input from all members of a work group to include those with higher and lower levels of line authority, and those in different roles (Ward, 1997). Fitting the purpose of this research to identify participants across the sectoral, professional, and organisational boundaries represented within the Westpark Initiative, the 360-degree approach meant that anyone who encountered the boundary spanning team leaders, as a part of the group work, was invited to participate.

Participants were identified through snowball sampling, beginning with the formal leaders of the WI and members of each of the multidisciplinary teams and then all willing participants of any aspect of the Initiative; further interviewees were identified as the Initiative proceeded. The three initial team leaders and the founder were first interviewed and each was asked for the names of other people to consider for interviews. Then the fourth team leader (the diabetes team was formed last), co-leaders, and active team members were personally invited for interviews. The last question on the Interview Guide was designed to aid recruitment, and was open-ended to cast a wide net: "Is there anyone that you would suggest we need to talk to about this subject?" (see Appendix H).

With an inductive paradigm, it is not clear at the beginning of a study how big the sample size should be, and interviewing until saturation did not seem likely in such a large context (Baker & Edwards, 2012). A pre-determined data collection timeframe of between one to three years was set at the onset, and I continued to interview people as they were identified and willing, including those individuals who may have been only marginally involved with the Initiative, in order to outline ever-expanding rings of potential influence in the local healthcare system. The minimum recruitment goal for interviews was initially nine people, three from each of the three teams. However, as the Initiative progressed, and my familiarity in the field increased, it was easier for me to identify the names of people who were involved at the very beginning, through those getting involved at later stages in the Initiative. From a list of suggested names, I was able to interview a wide range of people from the professional community who had some sort of contact with the Westpark Initiative. I also opportunistically recruited people to interview at events I attended. Email and phone calls were used to make initial contact, then, all interviews (except two diary follow-up interviews) were conducted face-to-face.



As is common practice, an interview guide was drafted and formulated by defining the research question, opening with non-sensitive questions, and ending with summarising questions (King, 2004). Through the scoping period, and early data collection, the interview guide was updated with the feedback from my research advisors, for best fit with the range of instruments being used. The specific questions were refined as data collection unfolded and were grounded in the real-life experiences of the participants. The interview guide was used to explore issues related to the experience of participating in the Initiative with a focus on boundary spanning processes and quality improvement priorities set by each team. Questions were developed to elicit rich details about knowledge exchange processes, successes and challenges in overcoming barriers, and noticed impacts at work and for patients (see Appendix H).

Each interviewee was assigned a unique alphanumeric code for data management purposes. Prior to each interview, participants were given an ethics committee-approved information sheet and given time to ask questions. Due to suggestions of the ethics committee, the language in the information sheet was changed from “boundary spanning” to “knowledge sharing” which the ethics committee felt was less abstract and easier to understand (see Appendix F). Prior to the tape-recorder being turned on, each interviewee signed a retained consent form, which was then stored in a locked cabinet in a locked research office (see Appendix G).

All scheduled interviews were audio-recorded and professionally transcribed for analysis. Forty-two formal interviews were completed with 39 participants. Two people who had worked together in the past agreed to be interviewed together, to provide local historical context. Four participants who were highly involved in the Initiative were interviewed twice, early and again at a late stage in the fieldwork, to examine their views on how boundary spanning behaviours had developed over time (see Appendix I for list and details of interviewees).

#### 5.4.4 Online Serial Diaries

All members of the four boundary spanning cases were invited to participate in online serial research diaries, including all those who were interviewed. Originally, it was anticipated that at least three boundary spanning team members would complete bi-monthly research diaries from each of the original three teams (nine expected). In the end, 11 participants completed 36 diaries and five were interviewed after diary completion (see Table 7 for an overview of diary completion).

**Table 7 Diaries by Case**

Case	Invited	Individual Participants	# Diaries Completed	Follow-up Interview
Anxiety & depression in BME populations	20	6	18	3
Dementia	4	1	2	0
Child & Family Health services	5	2	8	1
Diabetes	5	2	8	1

Initially, I drafted a diary template and piloted it with primary care staff outside of Westpark prior to data collection beginning. The final version of the diary template included tailored questions according to which of the four topic groups the individual was involved in, therefore there were four final versions to be delivered. An encrypted web-link to a unique diary template was then emailed to invited participants every two weeks over a period of two months (a total of four diaries per participant). The diaries included both Likert-type scale questions as well as a series of prompts for narrative commentary. Questions included the method and type of boundaries crossed, and whether cross-boundary work was in an area new to the individual (see Appendix J for an example of the diary template). Participants could choose to receive printed copies or online versions of the blank diary, and they were invited to view and keep completed copies of their own previous diaries. Only two participants requested printed diaries so they were supplied a set of four blank diaries and post-paid envelopes for return. The remaining nine participants completed the online version. All participants who were

completing diaries, regardless of style of delivery, were sent individualised email and phone reminders generally every two weeks until refusal or completion.

Five follow-up interviews (four face-to-face, one by telephone) were conducted with those participants who completed at least three or four diaries; in these interviews diaries were reviewed by the researcher in dialogue with the participant on the basis of a two-page summary - prepared by myself - of all the participant's diaries which was sent to the participant prior to the interview. The diary follow-up interviews were consented, audio-recorded, professionally transcribed and coded in the same manner as the semi-structured interviews (see above). Completed diaries were examined for themes relating to:

- individuals and their involvement in boundary spanning activities over the period of their diary entries
- participants activities in relation to their boundary spanning team
- any organisational or system-wide patterns of boundary spanning.

Interview discussion and subsequent analysis included examination for boundaries crossed by number and type, across time, between cases and by topic area. The diary-interview method is useful for gaining access to informants' experiences that a researcher is generally unable to observe. Such relatively unstructured diaries, followed by interviews, allowed me insight into participants' thoughts and intentions, and also helped check the internal consistency of accounts collected through other methods. It also elicited what Elliot (1997) called 'mutedness' or the hidden accounts that may not fit into structured categories from the researcher's point of view. Participant attrition is a known limitation with this method, particularly due to the time it takes for individuals to complete a diary, though I attempted to alleviate this problem through increased contact and debriefing efforts (Symon, 2004).

#### **5.4.5 Focus Groups**

Patients and carers who may have been affected by the local work of the Westpark Initiative were invited to attend focus groups to further elucidate how boundary

spanning activities might be experienced by clients. Many perspectives can be heard at the same time through a facilitated dialogue, which I felt would be more conducive of theory generation relative to boundary spanning, than through individual patient interviews. As a group method of organisational analysis, focus groups sit in a 'created' context that served the study for exploratory purposes (Steyaert & Bouwen, 2004). The focus groups explored the perceptions of patients of the likely impact of the WI on their own experiences of care and treatment. I was particularly interested in exploring any impact on patients of specific attempts to improve the vertical and horizontal integration of services and how they had experienced connections between multiple services over the previous year.

At the initial protocol stage, a pre/post design exploring patients' experiences appeared to offer one approach to collecting data to address the aims of the present study. But because of the fast changing nature of the boundary spanning intervention under study it transpired that this approach was unlikely to have generated insights to inform my overall evaluation of the intervention. My original plan to conduct pre- and post- patient focus groups was therefore not fully implemented. I also faced considerable challenges in establishing and conducting these in the specific topic areas (for example, open invitations for patient groups to participate were found not to be a structured part of the intervention as I had initially anticipated). My effort to establish focus groups was pursued immediately after ethical approval was granted. At every subsequent stakeholder event team leaders, GPs, and practice managers were approached to help identify appropriate ways to reach patients in their local practice areas; most agreed to help but follow through was not forthcoming. The barriers I faced in recruiting patients to participate in focus groups at an early stage of this study are similar to those faced by the intervention itself; indeed one of my findings is the lack of significant patient & public involvement in the intervention as a whole (including examples from my 361 hours of observational fieldwork where clear opportunities for the teams to engage with, and involve, patient groups were not grasped).

Despite these challenges, two patient and carer focus groups were conducted; both were audio-recorded and professionally transcribed. The patient information sheet was verbally reviewed with each group, with time to ask questions, and the consent forms (see Appendix N) were signed and collected prior to starting the recording. One focus group with seven diabetic patients (many of whom were also carers for diabetic family members) was completed in February 2012 and another focus group of two BME patients with anxiety & depression who had received counselling services from the wellbeing service was completed in March 2012. More BME patients had been invited, but the group was limited to two patients by convenience (see Table 8).

**Table 8 Focus Group Participants**

PATIENT	CATEGORY	GENDER	TIME SINCE DIAGNOSIS
FG1DM01	Diabetes Type 2	Female	12 years
FG1DM02	Diabetes Type 1	Female	6 years
FG1DM03	Diabetes Type 2	Male	unknown
FG1DM04	Diabetes Type 2	Female	20 years
FG1DM05	Diabetes Type 2	Female	12 years
FG1DM06	Diabetes Type 2	Female	11 years
FG1DM07	Diabetes Type 2	Male	unknown
FG2AD01	Anxiety & Depression	Female	10 years
FG2AD02	Anxiety & Depression	Female	1 years

Participants who agreed to the focus groups were sent an ethics committee-approved information sheet prior to attending (see Appendix M). On arrival to the focus group session, the content of the sheet was reviewed and each respondent had the opportunity to clarify any queries prior to giving written consent to participate. A discussion guide provided the structure for the focus group (see Appendix O).

Initially focus groups were planned with patients in all four cases. Despite ethics-approved fliers for recruitment, access to patients directly through GP surgeries was

more difficult than anticipated. GPs and their practice managers were repeatedly approached and many agreed to support the identification and recruitment of appropriate patients and patient representatives. However, few primary care staff attempted to recruit patients. The reasons for this are not clear. When asked, some staff stated that they were concerned to protect their patients from unnecessary intrusion. My impression is that staff did not see research as a priority for them, and in some instances, I suspect that failure to recruit was an expression of resistance to what was perceived as a management initiative, during a time of great change and uncertainty of future employment in the service.

In mid-2011, following repeated unsuccessful attempts to recruit patients via GPs and practice managers I decided to recruit individual patients directly to the focus groups but again - although promises of access were offered - similar problems were met. In January 2012 I again pursued the need for patient focus groups and was finally able to undertake these for the two most cohesive cases (diabetes and anxiety & depression for BME populations). In both cases, the practice managers and team leader were crucial in helping with patient recruitment. With the benefit of hindsight, given the very marginal (if any) success of the remaining two cases (dementia and child & family health services) in achieving their objectives, it is unlikely that patient focus groups, had I been able to convene them, would have identified local changes as a result of the WI.

## **5.5 Fieldwork**

My approach to qualitative data collection and analysis was to use a preliminary theoretical framework (Miles, 1979) drawn from the literature review; data analysis was a combination of induction (data-driven generalisation) and deduction (theory-driven exploration of hypotheses) (Langley, 1999). This approach has been used previously by organisational researchers in the NHS (for example, Fulop et al. 2005). The

fieldwork sought to provide a 'close-to' record of what happened once the four boundary spanning cases began working in their topic areas.

In order to capture this I: (1) studied the cohort of boundary spanning groups throughout the project by means of a combination of all of the various qualitative data collection methods described, and (2) assessed the value of the constituent parts of the project (for example, the leadership training, opportunities for joint reflection on amalgamated data, cycles of inquiry and action, and work on identified quality improvement projects) from the perspective of the participants themselves by means of semi-structured interviews and participant diaries. Equal attention was paid to both: (1) capturing instances of knowledge creation and exchange between different sectors, organisations, and professionals and then prospectively tracking how these led (or did not lead) to the implementation of improvements aimed at increasing the quality of services, and (2) the barriers to such boundary-spanning processes. An additional and important aspect of this research was to try to link the outcomes of increased service integration to impacts on healthcare quality.

To address challenges, multiple sources of evidence can produce a test of construct validity, so in this study, key informant interviews were combined with participant observation. Co-design of the instruments and review of the diary results by participants also helped to address reliability and content validity. Flexibility was required in being able to adapt the instruments over time. Reliability was addressed by using a documented protocol for the case studies, which I followed in a repeatable manner across all four case studies over time. The open-ended nature of ethnography as a qualitative style of research also allows for discovery of what has not yet been described which suited this study, particularly given the changeable context. Triangulation of a variety of methods was used to cope with the challenges of finding validity in what appears to be a fluid approach (Brewer, 2004). The techniques of in-depth interviews, participant observations with copious field notes, narrative analysis,

and personal vignettes were combined to provide greater overview of the subject at hand (see Table 9 for a summary of collected data).

**Table 9 Fieldwork Summary: Number of Participants by Case**

Method	ANXIETY & DEPRESSION	DIABETES	DEMENTIA	CHILD & FAMILY SERVICES	CROSS-CASE	TOTAL
Stakeholder Interviews	7	4	3	5	18	37
Serial Diarists	6	2	1	2	X	11
Serial Diary follow-up Interviews	3	1	0	1	X	5
Patient & Carer Focus Group Participants	2	7	0	0	X	9
<b>TOTAL</b>	18	14	4	8	18	

Case goals were identified and tracked in the four nested case studies, and compared over time and for understanding of the degree of impact on patient care measures. After data collection was completed over a two-year period, the data from all collection methods were overlaid, themes collated, and the generation of deeper conceptual understanding resulted.

## 5.6 Ethical Considerations and Approval

Ethical approval was received for the present study. Application to the Medical Ethics Committee in the Cuxford area of London was made on 19 May 2010. On 26 July 2010, I personally attended the ethics committee meeting and written notice was received that the ethics submission for this study was approved. The ethics approved forms used in the present study include:

- Three research participant information sheets (PIS):
  - Observation Information Sheet (Appendix D)
  - Staff Information Sheet (Appendix F)
  - Patient Information Sheet (Appendix M)
- Letters of invitation to participants:



- Focus Group – Advertisement (Appendix K)
  - Patient and Carer Invitation (Appendix L)
- Research participant consent forms:
  - Staff Consent (see Appendix G)
  - Patient Consent (see Appendix N)
- Two interview schedules:
  - Interview Guide (Appendix H)
  - Focus Group Discussion Guide (Appendix O)

All final and updated versions of the above forms are in the appendices as listed; place names have been anonymised. Throughout this thesis (and past and future disseminations) all people, places, and other identifying names have been replaced with pseudonyms or otherwise made anonymous.

Practitioners and other staff were observed and interviewed for this study. Assurance that their participation would not affect their job was an important ethical consideration, including ensuring that their co-workers and supervisors would not hear about work concerns through the researcher. I acknowledged such assurances by providing a copy of the Staff Information Sheet at the first interaction, then verbally confirmed confidentiality again at all interactions with participants. The ethics committee asked me to explain how I would handle inappropriate or unsafe, actions or practice. At their request, the written Staff Information Sheets was updated to include a statement that patient care that was witnessed as unsafe, or potential malpractice, would be reported, but otherwise shared information about healthcare services would be confidential. Participants were not told of each other's participation in the study. I was introduced widely as a researcher, but did not share results, including narratives related to specific personnel or locations. Consent forms were not signed at each meeting observation, however a general Observation Information Sheet was placed at every table prior to the start of observed meetings, and I was introduced as a researcher to every group I observed.

Ethical approval was necessary, particularly because patients were included in the study. Patients and their carers are an important stakeholder perspective to include when examining a wider view of care within and across a complex system. Adults

being treated for depression, anxiety and dementia are considered to be 'vulnerable adults' especially if they are in the category of treatment for mental illness. From provided templates, I created, reviewed, and edited multiple drafts of all the required documents, with the support and review of my supervisors. The Participant Information Sheet was designed to assure that patients understood their care would not be compromised and their responses would not be shared with their practitioners; the sheet was written with a level of explanation that was not too complex for the targeted groups in the study. The Patient and Carer Focus Group Discussion Guide included an additional sentence about not using recordings without express consent and that confidentiality could not be guaranteed (since others were in attendance), but that participants could leave at any time. To address this concern, I asked all participants to agree that they would not share information about other persons outside of the group, and to confirm with a show of hands; all participants verbalised and demonstrated agreement with this request for confidentiality (see introduction script in the discussion guide in Appendix O). The Consent Form included an additional sentence stating that if the participant withdrew from the study the data already collected could still be used. As with staff interviews, the written version of the information sheet and consent forms were made available prior to data collection, reviewed verbally with participants, and all participants were given permission to leave or refuse participation at any time. Signed consent forms were collected and stored in locked filing cabinets at the college. Electronic data containing individual names or other identifying information was password protected.

## **5.7 Data Management and Analysis**

An in-depth longitudinal research design was used, with a systematic and rigorous structure to increase generalisability. Data was gathered, managed, and analysed as consistent with an ethnographic methodology. Once access was gained, observations proceeded immediately with broad scoping queries first, with researcher fieldnotes

taken during and just after every interaction. Textbook steps for conducting ethnographic research are listed in Figure 10:

**Figure 10 Steps for Conducting Ethnographic Research**

1. Do participant observation.
  2. Make an ethnographic record.
  3. Make descriptive observations.
  4. Make a domain analysis.
  5. Make a focused observation.
  6. Make a taxonomic analysis.
  7. Make selected observations.
  8. Make a componential analysis.
  9. Discover cultural themes.
  10. Take a cultural inventory.
  11. Make an ethnography.
- (Spradley, as quoted in Speziale & Carpenter, 2007, p. 208)

These steps were addressed iteratively, in a non-linear fashion, throughout the fieldwork. Recorded observations were collected at meetings and scheduled events, more descriptive at first, to generate concept categories as a domain analysis, and then increasingly focused as in-depth taxonomic analyses developed and themes began to emerge.

Initially, fieldnotes and the first few transcribed interviews were reviewed using content and narrative analysis to elicit general themes related to boundary spanning. Next, data produced from these records was compared to forms of data gathered through other methods, including the diaries, which were collected later in the timeline. All transcripts, selected aspects of field notes and historical documents were entered into excel matrices and NVivo 9 software, to assist in the generation of themes and data interpretation.

All interviews and focus groups were digitally recorded and transcribed by a professional transcriptionist, then reread by the interviewer for allegiance to the spoken word. Complete transcripts were uploaded into qualitative data analysis and data management software, NVivo 9. Observational data were collected in the form of

ethnographic field notes which were re-read for common themes which were then written as “memos” and entered into the NVivo software. Each transcript was read and coded using the software to link common themes across interviews. A series of 48 codes were identified before analysis in three sets:

- historical and contextual aspects relating to the four boundary spanning teams of the WI and common questions in the interview guide
- boundary spanning themes identified in the literature review (see section 2.4), including sectoral, organisational and professional boundaries
- codes relating to the four aspects of the SECI framework (see Chapter 3).

Additional ‘in vivo’ codes surfaced during transcript readings and were added to the list for a final total of 260 codes (see Appendix P). Prior to, and during coding, I discussed assumptions, code selection, reviewed coded transcripts, and iteratively reviewed the codebook with my research advisors.

A triangulation design model was used to integrate the results of data collected synchronously through a variety of techniques longitudinally. In this way, a systematic method for analysing data was used as I iteratively analysed the data with feedback from my supervisors and I shared evolving interpretations as the research unfolded (Isabella, 1990). We jointly explored the significance of the findings to building theory from the qualitative data along the lines described by Eisenhardt (1989). In terms of final findings, my intention was to generalise in a theoretical/analytical rather than statistical manner (Eisenhardt, 1989; 1991; Eisenhardt & Graebner, 2007; Yin, 1999, 2009). A domain analysis as a means of managing and organizing complex qualitative datasets was used and this approach assisted in the development of key themes reflecting the perceptions of interviewees from the various sources, the observational data, and issues evident in documentation.

Following the end of data collection, the data sets from all of the collection methods were overlaid and themes iteratively collated and interrogated through discussion within the interdisciplinary research team (including my research advisors) to generate a deeper understanding of boundary-spanning processes. Monthly meetings with my

research advisors provided a productive environment for generating themes, sense-making, and enriched understanding through all stages of the study.

Data generation and data processing are two different aspects of any research method (Steyaert & Bouwen, 2004), though given the cyclic nature of ethnographic research, data collection and analysis are on-going in a continuous process (Speziale & Carpenter, 2007). In this way, toward the end of the study, data was generated in focus groups through the interaction of patients and carers when asked about how they had experienced the quality and quantity of integrated services over the previous year. The focus groups explored the perceptions of the patients and carers as to the real (or perceived to be likely) impact of the improvements made and reported as part of the project on their own experiences of care and treatment in Westpark (with particular regard to the impact on patients and carers of specific attempts to improve the vertical and horizontal integration of services). Key informants were interviewed at two points in time at least six months apart, and all diarists were invited to a follow-up interview. These perceptions contributed to, and validated the analyses. In the final stages, the interpretation of data was validated through feeding back emerging findings to the leaders and participants in the project.

In presenting the results in Chapter 6, temporal bracketing and narrative strategies are used in a holistic analysis so that the data remains contextualised. Chapter 7 then continues the temporal and narrative presentation of the data, by case and by domain. Chapter 8 combines the results of the meta-ethnographical literature review with the themes generated from the fieldwork, as viewed through the theoretical lens of SECI.

## **CHAPTER 6 Results - Stories of the Four Cases**

### **6.1 Introduction**

Chapter 4 provided an overview of the boundary spanning intervention under study, the Westpark Initiative, and its core components. In section 6.2 an overview of the Initiative is provided over time and by its own goals. In sections 6.3 to 6.6 I turn to the specific experiences of each of the four boundary spanning cases in terms of:

- the local context prior to the development of the Initiative in 2009
- their agreed aims
- their activities from late 2009 to early 2012
- the extent and nature of patient & public involvement in their work
- an evaluation of their impact on the quality of healthcare as of early 2012.

Throughout these sections, some illustrative vignettes (in shaded boxes) are included from the work of each of the four cases to illustrate the types of activities undertaken, challenges faced, and the impacts (direct and indirect) of their boundary spanning activities.

### **6.2 Shared Experience of the Westpark Initiative**

Below, Figures 11-13 illustrate the Westpark Initiative timeline from 2009-2012, as I experienced it, with detailed events (researcher and participant) noted. In each case, adjustments were made to the originally intended schedule, to adapt to logistical and political realities. I attended all events on the timeline as a researcher, and methods are included on the x-axis at the bottom of each figure.

Figure 11 Scoping Timeline

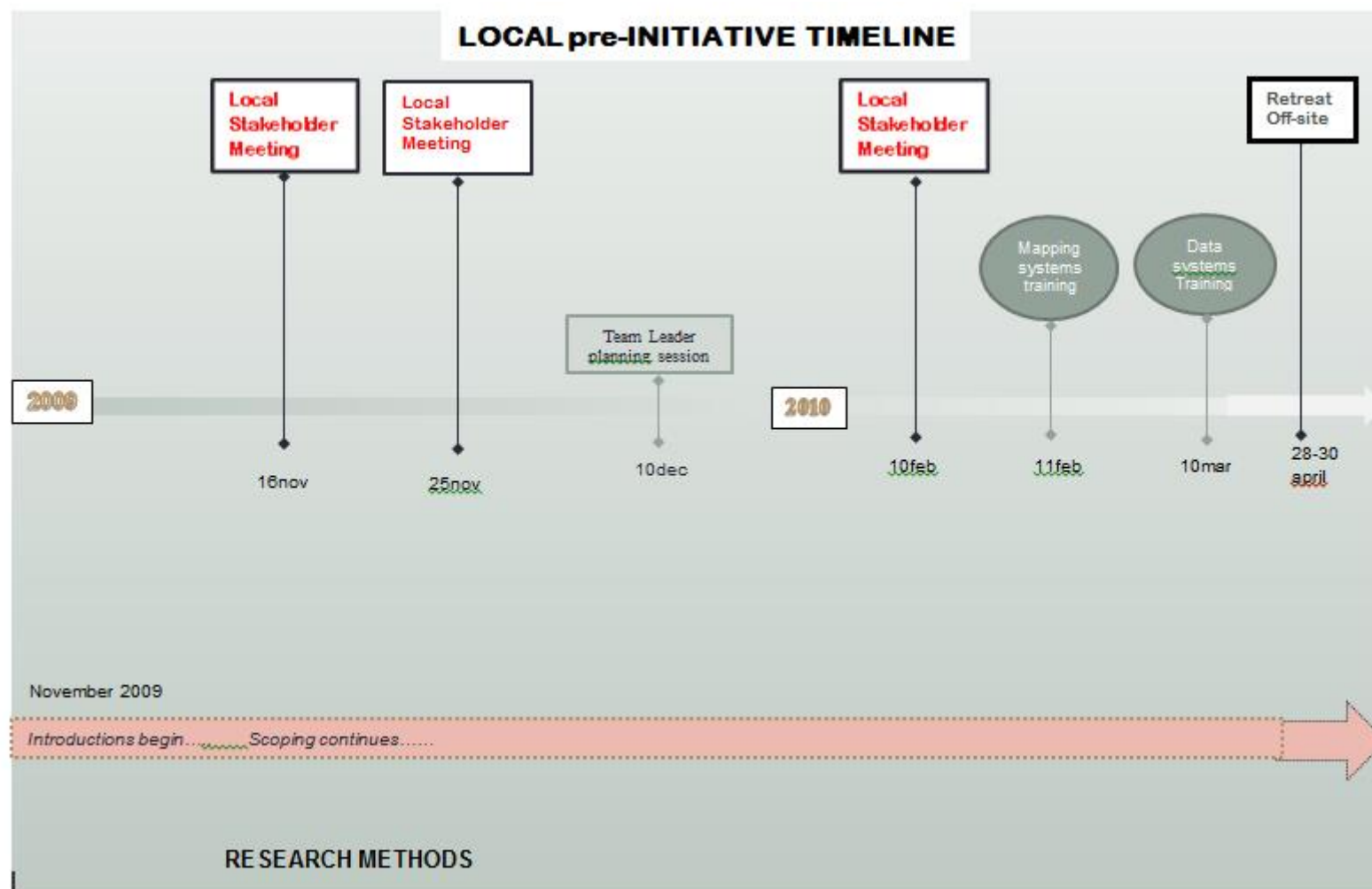


Figure 12 Study Timeline 2010-2011

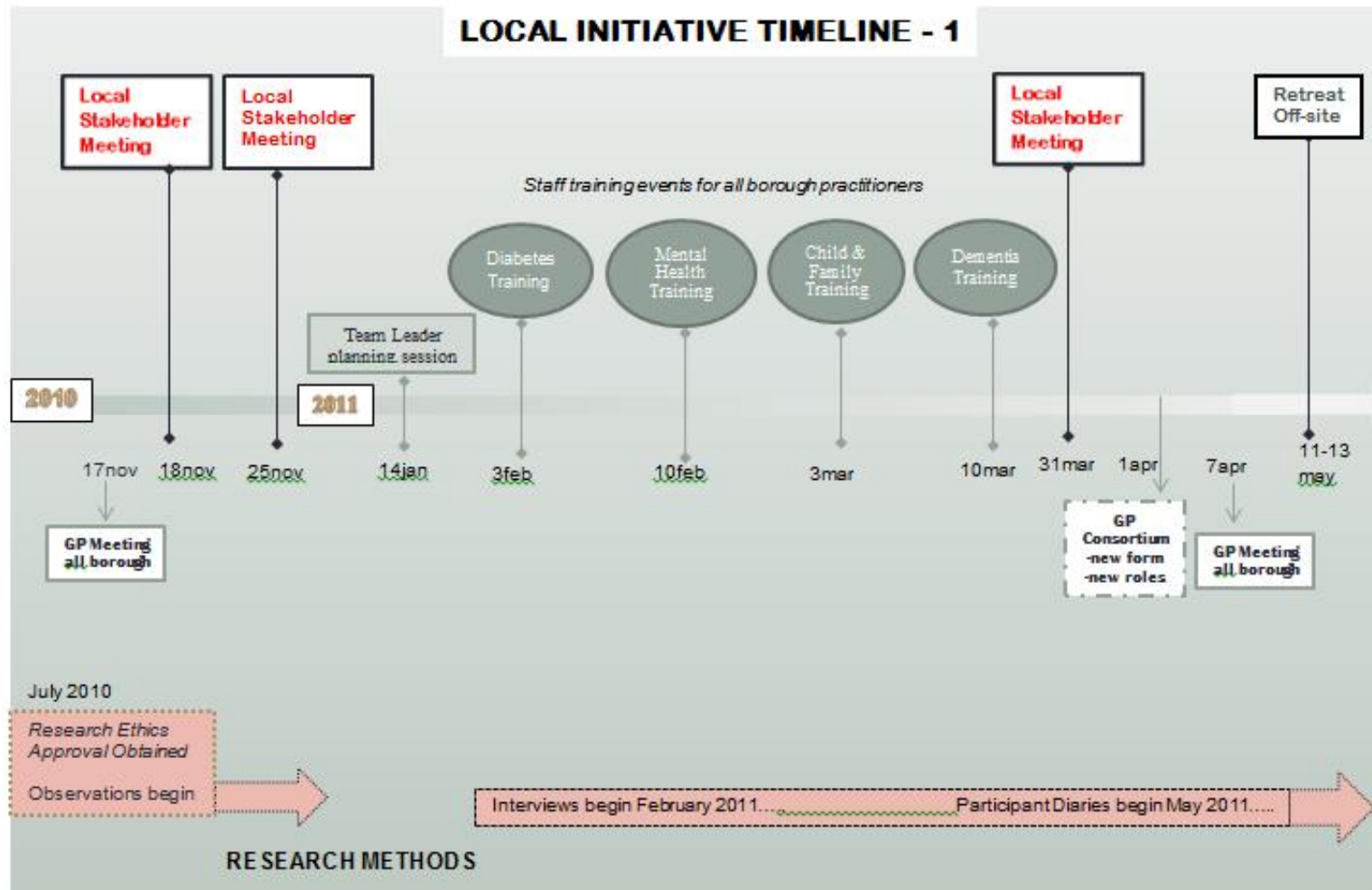
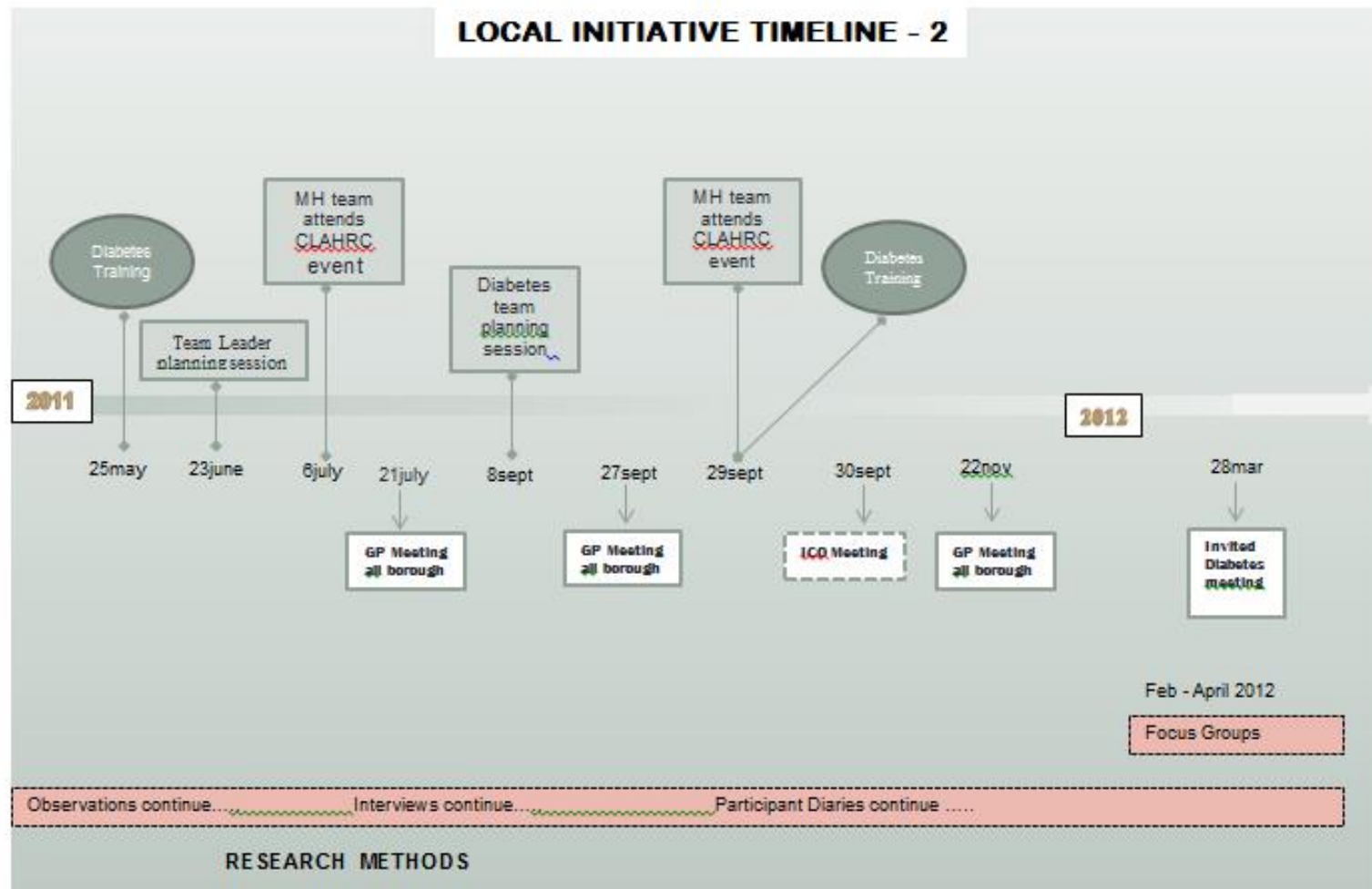




Figure 13 Study Timeline 2011-2012



By April 2010, each team had determined their own aims and outcome measures, as provided in printed materials and presented at a residential retreat to the other groups and all participants, and as presented below in Table 10. In observing the teams I perceived these outcomes may have been idealistic, but the initial teamwork involved being aware of measures. The ability of each team to reach their own self-defined aims and objectives will be explored, case by case, through the narrative data presented later in this chapter.

**Table 10 Outcome Measures as Defined by each Team**

<b>CASE</b>	<b>AIMS / OBJECTIVES</b>	<b>MEASURES</b>
<b>Anxiety &amp; Depression in People of Black and Minority Ethnic Backgrounds</b>	Good access to primary, secondary and other health services. Monitor outcomes for equity. Information	Staff Perceived sense of increased organisational commitment  Increased screening use of anxiety and depression measures, e.g. PHQ
<b>Dementia</b>	To improve dementia care To produce clear guidelines for early diagnosis and referral Need transparent and collaborative working between and within services to provide coordinated dementia screening and care.	Increased screening use of anxiety and depression measures, e.g. MMSE Other metrics?
<b>Child &amp; Family Health</b>	To improve awareness and use of children and family services	Awareness of other services (increase) Confidence of GPs in using other services
<b>Diabetes</b>	To examine diabetes from different perspectives. To use a combined approach for coordinated care.	HgA1C level (decrease) Rate of Emergency Admissions (decrease)
<b>OVERALL WESTPARK INITIATIVE</b>		Job related well-being, including: Depression, Anxiety, contentment pleasure, enthusiasm, etc.  Staff Job satisfaction as increased motivation,

		creativity? Relationship to burnout/job turnover?
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### 6.3 Anxiety & Depression in BME Populations Case

#### 6.3.1 The Local Context Prior to the WI

The aims and objectives of this Anxiety & Depression in BME populations case were closely aligned with national policy in this topic area and it was, in part consequence, able to secure external funding for its work (from a CLAHRC - see below). Importantly, 'Improving Access to Psychological Therapies (IAPT)' had been initiated as a programme across England in 2007 (Clark, 2011). Such extensive and well-funded UK government policy initiatives supported mental health services by increasing availability of cognitive behavioural therapy (CBT), and led to an increase of trained psychological wellbeing practitioners, including members of this particular boundary-spanning case. The IAPT programme, reinforced by National Institute for Clinical Excellence (NICE) guidelines and evidence gathered through early pilots, supported offering CBT through stepped care, and encouraged self-referral, along with GP referrals, to increase access for patients. In November 2008, the IAPT programme produced guidance for 'Commissioning for the Whole Community' which included efforts to reach BME communities (Department of Health, 2008b, as discussed in Clark 2011). Statistically, Westpark had a very high proportion of members of these communities, making addressing this national priority particularly important in the local area.

Team membership was very stable throughout the WI and the group had formal support for its role from senior managers. In the local well-being service, prior to the start of the WI, the person leading the team was already a mental health clinician and manager of a healthcare team. This team leader was directly encouraged by her direct report supervisor to take part in the Initiative when it began in October 2009. The same team leader was in place throughout my fieldwork period, from late 2009 through early

2012, as were three key team members (all newly trained CBT therapists). Support for the team, resources for data collection, funded study days, and supervisor encouragement, were present before and during the WI. Despite a disruptive local reorganisation of services, redundancies, and staff changes starting in mid-2010, this team also included at most times a community development worker, a consultant psychiatrist, and at least one patient representative, along with the consistent CBT therapists and team leader.

In addition, the techniques of CBT itself - including practical problem solving techniques and facilitated reflection - appear to have positively influenced the teambuilding efforts of this group (which was composed of a majority of CBT therapists). Supportive co-worker relationships from their - originally co-located - clinical setting of the well-being service were sustained even after the CBT therapists moved into positions as mental health link workers into local GP surgeries (see below). Importantly, the goal of increasing access to psychological therapies for local BME patients was explicit from the beginning of the team effort, as the goals for the WI then paralleled those for the IAPT programme.

### 6.3.2 Overall aims and Specific Objectives

The group set themselves one overall aim, with three specific objectives, at the April 2010 Stakeholder event (see Table 11). The key boundary-spanning intervention was to attach mental health workers ('link workers') to general practices in Westpark to increase appropriate referrals to the IAPT service. They determined that they would define their impact through referral rates of patients of Asian and BME backgrounds.

**Table 11 Aims and Objectives: Anxiety & Depression Case**

<b>OVERALL AIMS (as of April 2010)</b>	<b>SPECIFIC OBJECTIVES As stated in team document</b>	<b>MEASURES OF IMPACT</b>
Good access to primary, secondary and other health services. Monitor outcomes for equity	<u>General Practice Support:</u> attach mental health workers to Westpark GPs to help them to identify and treat mental health problems to use the	Referral rate of these people to IAPT at MHWBS from Westpark GPs compared to other Oxford localities

Information	<p>IAPT service optimally; provide a directory of services and tools to identify anxiety and depression in patients of different ethnic backgrounds</p> <p><u>IAPT/MHWBS:</u> monitor the changing pattern of referrals from different general practices and compare Westpark as a whole against other areas; develop its relationship-building role, to facilitate integrated working between general practice, older people's services, and specialist services.</p> <p><u>Whole System Integration:</u> form a group to explore what mechanism would facilitate on-going cooperation and collaboration; gather data to reveal changing competence of the system as whole</p>	
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### 6.3.3 What Happened – Case Activities

In early 2009, the head of the well-being service, Satveer, encouraged the senior therapist of the mental health team, Vinoda, to meet with the leader of the WI and join a core team with the aim of building primary care connections with secondary care, and to plan local stakeholder workshops to increase local mental health referrals. Although not formally assigned to take part, Vinoda, was already personally and professionally motivated to improve care for the local BME community in Westpark, having worked for a long time as a psychiatric nurse in the local area, which is also her childhood home. She and three members of mental health team had already worked with the IAPT service for the previous two years, and then together became involved in the WI, from

the 2009 stakeholder meetings forward. Vinoda stepped up to join the core founding team of the WI, with a keen interest in developing her own leadership skills, with the explicit support of her supervisor.

The main boundary-spanning activity by this team was to assign link workers as CBT therapists to specific GP surgeries with the aim of affecting the quality and quantity of referrals. Six CBT therapists were placed as link workers in Westpark, five in GP surgeries and one at the mental health and well-being location. The first took up post in 2009 (in response to the IAPT outreach goals and prior to the formal start of the WI) when a new GP surgery opened. One CBT therapist, Pam, was placed at the new site by the well-being service in 2009 to meet the IAPT goals for outreach, and she also became very involved in the early stages of the WI which she viewed as synonymous with her therapist role. A second link worker was in place at a second surgery from April to September 2010, then replaced by another link-worker.

In April 2010 a first application led by Vinoda to an outside funder, CLAHRC, was successful, serving as a great source of excitement and motivation for the team. In May 2010 members of the wellbeing service held a meeting in Westpark at the new surgery with local GPs which was well received. Later in May 2010, the team members took part in the annual residential retreat where their 2-minute digital story was used as an exemplar for the other teams during the 3-day retreat, bringing them great pride. In June 2010, outreach efforts included a newspaper article, an email referral push to GPs, and a practice based commissioning (PBC) meeting. In July 2010, members presented to the newly forming GP consortium, and in August 2010, the team conducted a focus group with practice managers to exchange information about well-being services. In November 2010, the team members attended an all topic WI Stakeholder event, presenting their work, again feeling proud that they could already demonstrate outcomes.

### Vignette 1 Exchanging knowledge across disciplinary boundaries

*Bridget* [WIP31E – specialist wellbeing advisor] joined the wellbeing team as an experienced advisor from outside the area in mid-2011. She was quickly aware that some GP surgeries seem more reluctant to refer patients to the service than others and attending a CLAHRC event in September 2010 inspired her interest in fixing problems, and “*setting down a more definitive plan*”. After spending six months with the home crisis team, one day a week, she describes the benefits of increased understanding from different disciplinary perspectives:

*“They definitely have a much greater understanding now of what we do and don’t do as such. And I think they’re more willing as well to pick up the phone and discuss it with the link worker or wait until Thursday and discuss it with them in a little more detail before they put that referral through, which probably really helps and it’s helped our waiting list [decrease] as well.”*

A borough-wide training event was hosted by the WI, and held on 3rd February 2011 and very well attended by GPs although the focus was on system-wide infrastructure and not improving knowledge. Another borough-wide training meeting was sponsored by the WI on 10th February 2011, and was well attended by GPs. Discussions about referrals to the IAPT service were openly facilitated, and aligned with on-going concerns about national reforms. However, this meeting focused more on infrastructure and re-design plans in the mental health trust than about offering screening tools online or in different languages. Non-GP clinicians, who had hoped to learn specifically about how to screen and refer, expressed disappointment in the meeting agenda. GPs were given the consultant psychiatrist’s mobile phone number, which appeared to appease some referral concerns; however, no decisions were made by the end of the meeting.

A follow-up application to CLAHRC was again successful in 2011, which supported the team, with some new members, with consistent and structured learning opportunities. Members of this team describe their involvement in the WI as being a ‘crucial’ part of providing micro-level support and enthusiasm for their boundary spanning work whereas they were more likely to credit CLAHRC with providing a macro-level structure which helped organise their efforts.

## Vignette 2 Exchanging knowledge increases awareness of other services

Pam [WIP10J], a CBT therapist and WI team member agreed to be interviewed twice, and provided four completed diaries, enthusiastically taking part in the research activities. In her diary follow-up interview she describes noticing that a patient appeared to be having memory problems, which were different to symptoms of anxiety and depression that had prompted a referral for counselling. Having attended one of the WI educational events about dementia, the therapist recognised different clinical signs, applied a memory loss tool she had learned, and then made an effort to refer the patient to the memory loss clinic.

“... it is a client that was referred to me by the GP for depression. Did an assessment and became quite concerned, and I’m really shocked that the GP hadn’t picked this up, because quite early on in assessment she was coming up with things that didn’t seem right, she was forgetting things. About by about session four or five, it took a long time to do the assessment simply because she wasn’t able to remember some of the things that we’d talked about in previous session, or things around the house, so the focus of the treatment went away from depression but more to memory. It picked up in my own mind, having had a presentation through Ganesa who works for dementia services in Coxford. In fact one of the meetings were actually initiated with the [Westpark surgery] GPs so they could get dementia services to come in and do a presentation in front of the GPs about their service. So, in hindsight, having spoken with Ganesa and knowing what I learnt from the presentation, bells were ringing pretty quickly that this lady doesn’t seem as if she’s remembering things the way we would do ordinarily, so I did a mini mental state exam in session, and out of that quite clearly it showed that she had... it was a very mini mental state examination, so it was showing mild to moderate signs of early onset of dementia, working age dementia. Then called Dementia Services in Westpark, they redirected me to [service in her postcode].”

When the patient returned for counselling therapy without having had an appointment for memory assessment, the therapist followed up with the clinic, located the lost chart and sent the referral through again. An increased awareness of other types of care available improved the ability to connect this patient to more appropriate services; however it took many extra steps and time-consuming effort to get the patient seen, which contributed to the therapist not making her assigned target of time spent with new patients. Awareness was increased, but cross boundary working was still problematic. Pam was excited by feeling effective as a practitioner but frustrated by her direct supervisor’s lack of support for her extra patient care coordination efforts.

Through 2011 this team struggled with multiple redesigns in services between the mental health trust and the mental health and wellbeing board, with many redundancies. Excitement about achieving social enterprise status evolved in the wellbeing service through 2011. By early 2012 social enterprise status had been approved



and appeared to be imminent, but due to funding constraints and inter-organisational pressures, was again in question by mid-2012. Staff motivation and morale was spurred by the achievement and waned on hearing it might not happen.

#### **6.3.4 Patient & Public Involvement**

In 2010, team members identified a previous BME patient with a willingness to engage with the wider community about her successful use of therapy for anxiety and depression. Radio programmes (in a local dialect) and a short (2 minute) film were produced which centred on this patient's story of her experiences. In addition, posters and brochures were used to reach a wide group of potential patients in different languages. By 2011 - when this individual patient representative grew somewhat overwhelmed by the need to make presentations - efforts to create a patient representative forum were already underway. Team members supported the development of a patient forum by late 2011, and in 2012 team members were actively mentoring the two members of this forum, with an aim for sustained PPI in their on-going improvement work. (The two former patients composing the patient forum were the same members of the focus group described in Section 5.4.4).

#### **6.3.5 Case Outcomes**

The team had set three objectives in April 2010 at the start of the WI: to attach mental health 'link' workers to Westpark GPs, to monitor changing patterns of referrals, and to form a group to explore whole system integration.

Pressure to provide evidence of the impact of the teams' efforts came from the local trusts, as well as their involvement with funded research efforts provided by an NIHR grant as well as the CLAHRC (for example, the latter expected weekly reports by team members which ensured consistent activity and self-evaluation). Members of the team spoke of a sense of excitement with the impact the link workers were felt to be having, as well as being overwhelmed by the need for data collection while also striving to provide clinical services. When a formerly reluctant GP began to ask for a mental

health link worker in his practice, the team saw this as a success. A coherent and specific goal of increasing referrals enabled this team to focus on appropriate methods for collecting useful data from the start of their work in 2010, and then to apply for more CLAHRC funding to support this data collection process in 2011. Through 2011 and 2012, the team continued to be motivated, and partially funded by CLAHRC, to try to collect appropriate evidence, particularly around referral rates in the BME population.

Throughout the study period team members were clear about their goals but uncertain how to interpret and present data about their outcomes. They knew that referrals to the well-being service had increased, but were hesitant to publish numbers for the first couple of years, partially because they were uncertain how to appropriately calculate the change over time, whether the ethnic distribution data was “clean”, and how to present the information with accuracy. They also felt that referrals from GPs were improving in quality, such that the right type of patients were being referred appropriately, though such information was not formally measured.

In February 2011, Vinoda described the outcomes at the time:

**Vinoda [WIL7G] – Therapy BME Team Leader:** “ ... it’s not just the link workers, I think it’s everything to do with the stakeholder workshops where we’ve had practice nurses come, we’ve got health visitors that have come, we’ve got people from the voluntary sector that are making referrals. We’ve got a self-referral line which people can phone, and we’ve advertised it in different languages ... We’ve established links in the temples, the Gurdwaras. We’re running a walk-in service in [a community centre] which is our older people service, where if someone wants to speak to one of my colleagues and wants a quick referral, we’re happy to do that. So it is a combination of stuff. But I think the GP referrals have gone up in those surgeries where there’s a link worker, and we’ve got stats to prove that.”

Vinoda further described signposting to the volunteer sector for domestic violence support, and how waiting times for CBT had decreased from 18 months to two to four weeks. Persistently throughout the study period, Vinoda continued to relate how important the WI was to her own professional development, and the service:

**Vinoda [WIL7G] - Therapy BME Team Leader:** Without the project, I don't think we would have made such an impact, because we wouldn't have had the time. Not just the time - especially the time, but the shared knowledge and experience and working with the other teams to do that.

Informally, patient satisfaction was being catalogued as a list of small gestures (such as gifts of fruit) from thankful patients who were culturally comfortable with such exchanges. PHQ-9 data (patient health questionnaire) was being collected at every patient visit for CBT counselling, but the data was sent to a distant university and not always accessible to the staff, so changes in individual patient scores over time were not available at the time of care. In early 2012, the team drafted a report for CLAHRC, charting a 810% increase in referrals (2008-2010) from the Westpark locality and 939% increase from the Asian community in the same period. In 2007, referrals were fewer than 50 in number and in 2010, referrals were closer to 750. A creative variety of promotional activity was credited with affecting professional and patient use of services, with evidence shown in increased referral rates, more appropriate referrals, and perceived increases in awareness of the service amongst the BME population.

### **6.3.6 Patient and Carer Focus Group**

A focus group was held in March 2012 with two patients. One participant "Ting" [FG1MH01] had been seen at the women's centre in Westpark ten years prior, then four years ago she had begun to work with the Coxford women's centre as a volunteer. The other participant "Vanita" [FG1MH02] had received CBT for depression when referred by her GP a year ago.

Both talked about the importance of being quickly referred and the uncertainty of the time suffering with anxiety and depression but not having yet begun to receive care. Having a 'real' person to talk to was a particular priority too. The first participant had called a hotline but really wanted to meet with someone immediately. It took the second participant three weeks to be seen by the wellbeing service after her GP told her she might have depression. Like many patients, she was seen by her GP for another complaint (shoulder pain), and happened to mention her trouble with poor

sleep, worry, and distress. At the time she was told it would be 10 days until being contacted for some type of *“psychological help”* which *“felt like a long time”* but when she was called in 5 days she was quite relieved:

**Vanita [FG1MH02]** Yes, I was given a number to call, and I was very reluctant to call that number because they have so much box ticking going on in many of these organisations, and I really was not up for anything like that, because it was at a very serious point in my life, and I really did not want to have to sit in front of anyone just checking off things and stuff. So it took me a good week before I called. Then when I called, they told me it was going to be another ten days for someone to call me. I said, ‘Here we go.’ That’s the way I felt, ‘Here we go.’ But I think they called me within five days. Within five days really I got a phone call. I thought they were very professional on the phone, which was surprising. She told me she would be calling back, and we’ll be going through a kind of interview on the phone. All of that went exactly as she said. Then I was referred to here, immediately I was referred to here.

The first participant had called a hotline but really wanted to meet with someone immediately.

**Ting [FG1MH01]** I personally was very lucky that I’d got people around me that were able to step outside of the box – because I was not a very easy patient – step outside of the box and deal with me on a really serious one-to-one level, and not what was written here, because I was not going to work in my case. I was very fortunate where that was concerned. At the beginning, in addition to the counsellor I had an advocate....

Patients often have a need for advocates outside of the mental health system, perhaps through the informal support provided by family members, as well as needing more formal legal advice and links to local agencies. These patients both needed support in having to address issues with the local council, for instance. The first patient needed help to work out issues with her pension, having to go to court, harassment where she lived, and housing difficulties. Parallel to psychological distress, she experienced language barriers as well as pressing concerns in her daily life. Connections to different services were crucial for both:

**Vanita [FG1MH02]** “Yeah, I myself did a lot of research on this thing. But my case probably was a very unique case, I’ve got to say. It probably was a very unique case, and that’s what my counsellor told me too. But the big thing there is that they were able to split the... she was able to say, ‘You know what? I’m going to deal with her mental situation....’ Yeah, I think the big thing there is... and I remember even feeling some relief, just on the very first meeting with her, that, ‘Okay, we’re going to remove that part, don’t worry about that right now, we’re just going to look after you.’”

In August 2011, the WI anxiety & depression in BME population team began recruiting former patients for a patient forum to inform their work. Given their past experiences, both patients were eager to help improve mental health services for people who may struggle as they had:

**Ting [FG1MH01]** “My counsellor told me that they want to start this group, and she thinks I would be a good candidate if I was interested in helping them set the group up. With my experience and everything I said, ‘Yeah, why not?’ Because I think it’s important.

**Vanita [FG1MH02]** “One of the reasons I joined the [forum] and being part of helping set it up is listening to other people and their situation. I think expediency is very important, that they react right away to a call. I think I was very lucky. I’ve heard of some people who have not been that lucky. I think if I did not get that immediate intervention, it wouldn’t have been so nice.... Shorten time from the time you call to getting you in to see someone. When I called the very first time, I got a recording. When I called the first time, I got a recording, and the recording asked me to leave my name and number and that someone is going to call me back in five to ten days, okay. Now, dependent on the urgency of that person, that five to ten days is a very critical time.”

Having a hotline to call was an important aspect of swift services according to these two patients, and having to leave a recorded message was less of a concern if a quick response was forthcoming. In the focus group they discussed together the importance of a free central number for help but also recognised the cost barriers to implementation. As the second participant explained:

**Vanita [FG1MH02]** “... to get an 0800 number available, and we were told today an 0800 number is free to the caller, but the organisation said the 0800 number has to pay for that, and they don’t know if they have those kinds of funds. This is very important, I know from working with the [refugee agency], sometimes people don’t have a ‘phone, they don’t have money, or they have a phone and money, they need to get out of the house.”

Both participants in the focus group acknowledged that their involvement in the patient forum was helping others as well as therapeutic for themselves in terms of building their own confidence, something their CBT therapists had encouraged and acknowledged.

## **6.4 Dementia Case**

### **6.4.1 The Local Context Prior to the WI**

The aims and objectives of this team were aligned with national policies relating to dementia services although it was not clear how changes to local services would be implemented and their impact measured. NICE clinical guideline 42, issued in November 2006, and amended in March 2011, set out best practice for person-centred dementia care. Non-discrimination, consent, involvement of carers, and coordination and integration of health and social care were considered key priorities as were memory assessment services. Appropriate dementia-care training for all staff working in the health (including acute hospital settings), social care, and voluntary sectors was also considered a priority (NICE, 2011).

In 2009 the Department of Health published 'Living well with Dementia: A National Dementia Strategy' to improve three key areas: awareness, earlier diagnosis and intervention, and quality of care (Department of Health, 2009). Projections were that the population with dementia might double, and costs for care might treble, over the next three decades. Seventeen key objectives were suggested for local implementation and members of the dementia team discussed these objectives and priorities at their meetings. These discussions helped surface barriers to integrated services, especially between GPs and the local mental health trust:

**Sandra [WIP9I] - Assistant Director mental health trust:** GPs, they have to have such a broad spectrum. And I think the biggest fault that specialists have - and I include ourselves in that - we tend to look downwards, all we can see is our own specialism. And in terms of the referral all we can see is, 'The GPs hasn't filled in the right details, the right forms, the nasty man, we are not going to see the patient.' Whereas actually from a GP's point of view they're seeing such a broad spectrum and we're expecting them to do 120 things. You know for every specialty expect 120 things and I can understand why they sort of don't want to refer on, don't want to talk to us. So we were equally at fault ...

At one of these meetings one of the team members, Amy, reported that it was anticipated that there would be an 18% increase in the population of people over 65 years of age in Coxford by 2025 and that Dementia UK had projected a 15% increase in early-/late-onset dementia from 2007 to 2020. Amy reported that in Coxford there were currently 2,638 people with dementia but only 1,157 of these were recorded in the relevant QOF dataset. She described that the local mental health trust provides monthly reports to the PCT including the number of patients referred, diagnosed, prescribed and those who do not return for follow-up, and that the mental health trust had spent £4.7 million per year on dementia (more than half their £7.8 million budget) and £220,000 pounds per year on Alzheimer's drugs. In March 2011, the NICE Guideline amended the mini-mental status examination (MMSE) score to a lower threshold for prescribing certain medications for patients with mild cognitive impairment and supported the use of anti-psychotic medications for people with mild to moderate disease. Dementia team members were well aware of these national developments and guidelines and discussed them at their training event in early 2011.

### Vignette 3 A new initiative: a new hope for integration

Team member **Amy [WIP18R]** trained as a social worker and, with many years of experience in social care, spoke of a long local history of frustrated efforts to improve integration with primary care.

“... I had a quick corridor conversation with Chris about eighteen months ago when this was all being discussed, and immediately it became obvious that he understood GPs and we didn't. [Laughs] And I think that - and this is classic around secondary mental healthcare services or even any other silos - they don't understand each other. And I think that GPs have consistently not been understood more than any other silo ... their world view is so different to secondary care and so different to social care which is my background ... previous to this we had made loads of attempts from the mental health trust to invite GPs to lunch, to start working groups, to ask them what they were doing, to ask them what they want from us, to develop a shared care protocol ... we were lucky if we got any GPs. I spent months, for example, e-mailing the Chair of the educational committee, and months being completely ignored.”

As a social worker Amy could see many missed opportunities to connect patients to much needed services and she eagerly aligned with the WI dementia team but was told she would be made redundant in September 2011. Full of enthusiasm she continued to build connections across mental health services where she was able, and even in her own time. Eventually she found work at the PCT to support integration between the different WI topic areas, including providing support for the diabetes team, then with the anxiety & depression in BME populations team, where she was still working in early 2012.

This team had the strong starting point of a team leader who was creative, passionate, and already engaged in efforts to improve connections between primary and secondary care. Prior to the WI, Sandra, the team leader had already worked for over a decade as a mental health nurse and experienced manager and was well aware of challenges unique to Westpark. In 2009, as an experienced psychiatric nurse who had just finished her degree, she returned to lead the dementia service, for organic disease in older people:

**Sandra [WIP9I] - Assistant Director mental health trust:** We actually looked at our GP referral rate in dementia and very significantly there was a number of surgeries in Westpark that hadn't referred in 18 months and we knew that this wasn't right, the hypothesis was that we should have had a lot more referrals. When you looked at the population we had, the epidemiology formulas, we knew that there was an awful lot of patients that were not being referred to us, so anything to sort of try and elicit more referrals in Westpark



Sandra had many ideas about how to improve care for patients with dementia in the community but - despite having many personal anecdotes on how she had personally connected patients swiftly to the right services - was also aware of the barriers to integrated care for this group of patients. Early on in the WI Sandra identified the potential for a nurse in a higher band 7 position to link primary and secondary care services for older patients with dementia; a local nurse, Ganesa, working in dementia was promoted to this position with the aim of integrating services. However, Sandra did not feel that there was senior-level support for this innovative new role, portraying an out-dated management structure resistant to challenges to hierarchy and authority (especially at the mental health trust and amongst consultant psychiatrists):

**Sandra [WIP9I] - Assistant Director mental health trust:** "...And I think they were also very, very conscious that the service was changing beyond when they were comfortable with. At the end of the day they were old-time consultants. In fact, one consultant had set up the old age service some 15/20 years ago; this was their initiative, they'd set the criteria. It's like a lot of other places, if you're setting up a service you generally keep your criteria for acceptance very, very rigid so you don't flood. The only problem was we kept the criteria very, very rigid and we got a reputation for not accepting referrals."

Despite this perceived lack of support the team leader had sought in her own personal time - prior to the WI - to build connections through existing committee structures with other NHS and social care staff but with little success.

#### **6.4.2 Overall Aims and Specific Objectives**

The dementia team set themselves the following four broad aims, and seven more specific objectives at the April 2010 WI event (see Table 12).

**Table 12 Aims and Objectives: Dementia Case**

<b>OVERALL AIMS (as of April 2010)</b>	<b>SPECIFIC OBJECTIVES As stated in team document</b>	<b>MEASURES OF IMPACT</b>
<ul style="list-style-type: none"> <li>• To improve dementia care</li> <li>• To produce clear guidelines for early diagnosis and referral</li> <li>• Need transparent and collaborative working between and within services to provide coordinated dementia screening and care.</li> <li>• To help clients, carers and family members to understand better when to see their GPs</li> </ul>	<ul style="list-style-type: none"> <li>• Provide training and access to diagnostic services for primary care clinicians</li> <li>• Begin regular meetings between specialist mental health professionals, GPs and practice managers to discuss clients</li> <li>• Develop culturally sensitive cognitive screening tools to assist in early diagnosis of dementia from clients from different ethnic backgrounds</li> <li>• Memory clinic staff to provide ad hoc advice to primary care staff</li> <li>• Provide information on dementia for GP surgeries (leaflets in different languages). Develop a web-resource to include referral criteria and helpful information</li> <li>• Develop ways to integrate referral letters with EMIS and VISION systems to quickly attach basic information to the referral form</li> <li>• Compile a directory of dementia services within the borough of Coxford and disseminate to relevant services</li> </ul>	<ul style="list-style-type: none"> <li>• # Referrals of patients with memory problems to the Community Mental Health Team</li> <li>• 2006 local Mental Health study of GPs Views about its service</li> <li>• Dissatisfaction with trust</li> <li>• Feeling ill informed about work of trust</li> <li>• GP concern with access to services and communication</li> </ul>

#### 6.4.3 What Happened – Case Activities

The team leader, Sandra [WIL9I], aligned her personal interest in service improvement with those of the WI and - without initially high hopes - committed to attending events despite a lack of supervisor support. Additionally, a band 7 community nurse, Ganesa, became a co-leader of the dementia team. Early in the WI, at the December 2009 multidisciplinary stakeholder event, Sandra noted some positive outcomes:

**Sandra [WIP9I] - Assistant Director mental health trust:** “We have learned more in one short afternoon than we have in five years. Thank You. What was evident is that the language we use in different systems is different. We need to update our materials in this way ...”

#### **Vignette 4 Personal development through participating in the WI**

**Ganesa [WIL3C] a specialist practitioner nurse**, was hired into the band 7 nurse position seeing it as a good opportunity for career progression, though she was often observed to be reluctant to take a formal leadership role. Others are aware of her quiet manner and worry at times that leadership of the team may be difficult, especially with her reticence to speak publicly. However, through involvement in the WI Ganesa noticed her personal development and the ways in which colleagues respond to her:

“... the other people, they can see that as well. Other colleagues. Yeah, it affects all the team members as well, because the other members of the team some will come back to me asking some sort of information or guidance ... Not all of them. Some of them they have, definitely, I can say this. The comments are like, ‘Okay, you’re much more efficient in doing the things that you have done before,’ and they are much more comfortable coming to me asking a question, and I feel more comfortable giving them the answer as well.”

Part of her own personal development included the way in which Ganesa used improved communication and language skills with patients:

“... I’m talking about the people within my ethnic minority ... That has been changed and it has been improved a lot. Because I can actually relate my own bi-linguistic skills with the clients of the ethnic minority, and they feel much more comfortable with me talking in my own language while I’m assessing their needs ... They are more comfortable to speak to me as well.”

Improved confidence in speaking with patients and clinicians made a great difference for how Ganesa perceived the need for better integration of services:

“One of my patients was being transferred from the acute side, from the under 65, the other team, and that client only [spoke a certain Indian] language ... I took over the case because I knew that he was not going to go anywhere to our team, so he won’t be feeling that comfortable with any member of the staff ... with the joint working with the adult CPN and myself, we worked together to make him feel so comfortable in the environment, and he was so reluctant to come to our services because of this language barrier ,... He said, ‘I’m not going to transfer my case to the older people service because of this problem.’ I talked to him and made sure that I reassured him, I made sure that he understood what I said, and I listened to him very actively with all of my communication skills, and he was so... he doesn’t want to go to the other side now. He felt so relaxed with me, he said, ‘I want to come to your team now,’ which I thought that was an achievement.”

At the April 2010 WI stakeholder event these two co-leaders presented a ‘rapid appraisal’ of local dementia services and the quality of care, explaining that 30% of GPs were dissatisfied with the mental health trust and 47% felt ill-informed. Although

the team leaders recognised the need to increase educational offerings and access to culturally sensitive cognitive screening tools, they struggled to make this happen, possibly because of lacking a cohesive team. Additional funding or time for extensive outreach or training was not available. Sandra, Ganesa and Amy attempted to increase awareness about dementia care with Westpark GPs through outreach efforts and teaching sessions in GP surgeries in the summer of 2010:

**Ganesa [WIL3C] specialist practitioner nurse:** “The response from the GPs initially was not good at all, but as the WI progressed on, the GPs are much more into that. Not all of the GPs are. I can still say that there are, within the cluster of my GPs, out of six, there are four active GPs ... which is quite a good achievement. I think it’s just the... lots of GPs, my personal experience is that they ... think that the people who are over 65, it is because of their illness, old age ...We have to go back and back, again and again, to them, just to make them aware and also doing some sort of teaching session, not with the GPs themselves, but with the other... the team as well. For instance, I had two sessions with two different GP surgeries, not only with the GPs, with the other professionals, the receptionist, the Practice Manager, the nurses, talking about the dementia itself. It’s not an age related disease.”

Receptionists and practice managers were therefore included in outreach efforts; forming such connections were an important aspect of the WI and later in the same year Ganesa could see a difference:

**Ganesa [WIL3C] specialist practitioner nurse:** “Definitely. You can actually ... like I can ring them ... before the thought of ringing the practice manager, it was very hard to get hold of them. But now you know them, I want to speak to them, okay, they just come to you on the phone. Definitely the relationship has been changed.”

A borough-wide staff training event for dementia was held one evening in March 2011, and hosted by the members of the WI dementia team. Sandra helped facilitate the event with Chris, and an occasional GP Participant of the WI, and a consultant psychiatrist at the mental health trust presented about early diagnosis to the (mostly) GP audience. Sandra and Amy suggested that the WI dementia team should continue working on the use of the MMSE, improving the interface (a) with dementia end of life care and (b) with intermediate care to avoid hospitalization. Sandra reported that the mini-mental test had now been translated into two Asian languages. Chris facilitated

table-top discussions and attendees discussed their developmental needs, which included requests for online decision support and integrated referral forms. Proposals for a crisis support team, decision support tools via email, case coordination with adult social care services, and more feedback for families were among other proposed solutions.

### **Vignette 5 Opportunities to cross professional & organisational boundaries**

**Daphne [WIP37K]** is an **Occupational Therapist**. She and her practice group attended the dementia training event in March 2011 hoping to learn how to better connect with mental health services in the local area and around the table they passionately discuss amongst themselves how often they see patients and family members with dementia or mental illness and how it hampers the care they can provide. It takes too long to gain access to the home, the patient can't remember the exercises, staff are verbally abused and miss their targets for providing patient care in a set number of sessions. Knowing the patient is inappropriate for rehabilitation yet unable to convince anyone in primary or secondary care that some type of mental health services may be needed is a frequent frustration:

"What I do see is the blocks. I don't know that anybody understands how services work. I think we all work differently. Our urgent responses are all different. For example, the urgent response of my team is within 24 hours. The urgent response of a Social Services occupational therapist in another team might be a week. So we all work completely differently, and nobody is clear about what the route is into services."

Daphne describes that she and her colleagues came to the meeting about dementia at the last minute after a verbal invitation to one member. They struggle with a wide variety of mental illnesses and are keen for any kind of training or help. They talk quietly amongst themselves but no one speaks up to the rest of the attendees, even when prompted to brainstorm local solutions. However, later Daphne recalls the meeting she attended:

"I think it's allowed me to... I mean, a few times I have tapped in now to the wellbeing service...because of that event. It's been good to put some faces to those services, because then you just understand quite quickly how that would work, and you can make a quick call, have a chat with somebody and see if it's appropriate rather than making your blind referral. Because people know you, and people take the time then to talk with you – or I have found – take the time to talk with you, and perhaps say, 'Well, we might not be the right services this time, but have you tried this?' And that's very useful. You don't get that on a blank referral sheet."

get that on a blank referral sheet.”

That meeting ended after a long discussion about how to reorganise dementia services, with attendees reporting better understanding of the work of local memory clinics and that self-referral was possible. Despite wide attendance by both GPs and non-GP clinicians (such as occupational therapists and pharmacists) I observed that some participants left the meeting feeling unacknowledged. Attendees appeared to increase their personal awareness of screening tools but informal networking opportunities and a facilitated discussion of streamlined referral processes were not provided. Non-medical colleagues remained quiet during the training event, although amongst themselves ideas for integration were overheard. Daphne left feeling frustrated but agreed to be interviewed and to complete diaries. Despite have no formal involvement in the Initiate, she verbalised an eagerness to find ways to improve services and recognised the value of getting involved in research.

In late 2011 Sandra left a management post for early retirement. By early 2012, the dementia team had no leadership and lacked a coherent goal. The infrastructure of the mental health trust had changed, and it had taken over the tasks of early assessment; the attention of the Coxford PCT, now a commissioning group, moved on to other priorities.

#### **6.4.4 Patient & Public Involvement**

The dementia team did not undertake any form of patient and public involvement in their work although a local Coxford charity had been active in the locality since 1982 to support relatives. This independent organisation had merged with other services numerous times - undergoing additional changes in 2010 - which made outreach to this hard to reach patient population even more difficult both for clinicians and researchers.

#### **6.4.5 Case Outcomes**

The dementia team had set itself seven objectives at the beginning of the WI (see Table 10 earlier for details). This team did not gather quantitative data to report in a format that could be easily communicated to identify progress toward their goals. However, Sandra reported a number of changes that she associated with the work of

the WI although the impact of many of these on the quality of care is hard to quantify.

For example:

**Sandra [WIP9I] - Assistant Director mental health trust:** And the other thing that we've actually done as a result, and I think it is primarily to do with the WI, because we did a decision support tool and as the WI we actually developed some information packs, we've done a post-diagnostic pack that actually sits on the PCTs website that anybody can access. Essentially all it is just information, used by professionals but also individuals, like what is the progression of dementia, the different types of dementia. So if you've got a diagnosis of, say, Lewy Body Dementia, you can get a factsheet about Lewy Body Dementia.

### **Vignette 6 Missed opportunities to span professional boundaries**

**Sanjay [WIP34H]** is a local **community pharmacist** who attended the dementia training event because it was conveniently located and offered credit for professional development (CPD). He sees himself as a competitive business owner and as a trained professional who works in the front line of primary care in recognising signs of dementia in patient, or, more often signs of strain in an adult caregiver to an ill patient:

"But also we have a lot of patients who suffer from dementia and I thought maybe it would give me a direction of how ... because a lot of families come to me and they're at a total loss as to what to do ... Family members, they're totally lost what to do because either the GP doesn't want to know because it's costing him too much. It's all cost-based as we know, or there's a long waiting list with the units, or they want to go private. The cost of the drugs is very, very high."

Unfortunately, despite his willingness to attend an evening event he did not feel he received the information he needed:

"I was hoping that they would keep ... you know because I left my email and everything there. I was hoping I would get feedback. I wanted it in a bullet form, 'patient walks in or carer walks in, they have this, this' ... but there was nothing. I really thought it was a waste of money ... There are no connections. Unfortunately the patient or the carer to the pharmacy, pharmacy to the doctor, the doctor to the social services, it's disjointed."

Sanjay could recognise problems when services were not integrated and could generate ideas for community-level solutions but was unable to make better connections happen for patients, and still felt disempowered after the training event.

More concrete evidence of improvement, collected through internal audit but not necessarily a direct result of the WI, was also provided by Sandra:

**Sandra [WIP9I] Assistant Director mental health trust:** “Our referral rate now, from the point of referral, receiving referral to initial assessment is probably two weeks ... Before it used to be 11, 13 weeks ... We’re seeing people very, very quickly ... We actually do regular audits just to make sure of that. The way the day hospitals work hasn’t changed as a direct result of the WI but they have become the Memory Assessment Service.”

### **Vignette 7 Working together through relating and compromising**

**John [WIA2V]** is a **commissioner** of dementia services who was involved in the WI by having supported the very first meetings, attending annual retreats, and being an administrative leader in the primary care trust. He was very aware of the practical and financial barriers to effective cross boundary work, and had a long-term interest in service improvement.

“The interesting thing was, for the first time with this approach, when we brought together Alzheimer’s Concern, Westpark mental health trust most notably, and GPs, they started to talk to each other on some very practical ways of doing it ... what I found really interesting is that the WI helped people. It made some people compromise. Actually, it helped with their willingness to compromise, whereas before it wouldn’t have. And it all comes down to interpersonal relationships ... at least it’s shifted both Westpark mental health trust and GPs towards a closer position of working....we know it’s directly attributable because it only really happened to those GPs who were involved in the discussions ... So I think some GPs, a few might have changed their position towards Westpark mental health trust, which I think is probably even more important than having changed pathways, because pathways haven’t really changed. They’re the same pathways, just there’s more willingness to work together.”

Sandra did credit the WI with having helped to provide new insights into referral processes and that these had led to process improvements:

**Sandra [WIP9I] Assistant Director mental health trust:** ... “we have completely changed. Basically we’ve re-audited the GP referrals to us and that showed an improvement in referrals. We are also less pedantic about the information we require on a referral, there is not the necessity to do all of the blood tests. We’ve become a lot more pragmatic, we will accept a referral, go out and do an initial visit ... We’ve developed a decision support tool to help GPs decide whether they should be referring to us.

Although Sandra then described that the tool was on the PCT website and was not being used as often as it should, and that a much hoped for form of electronic referral had not been accomplished:

**Sandra [WIP9I] Assistant Director mental health trust:** “The biggest thing that the GPs wanted was an electronic way to refer to us and that, unfortunately, is an area we have failed in. To be honest, it’s certainly beyond my sphere of influence, the systems need to talk to one another, and they don’t.”

When asked how patients may experience dementia services in a different way as a result of the WI, Sandra explained changes to both routes of accessing services and referral rates although, again, she did not attribute such improvements directly to the work of the WI:



**Sandra [WIP9I] - Assistant Director mental health trust:** “Patients can now either come through an outpatient route or through a day service route for diagnosis of dementia and we are working towards six weeks. From a first initial assessment to diagnosis. [Normally it was] at about nine weeks ... Again, I don't think this is all WI, but it's everything all rolled into one.”

In September 2011 Chris reported to the (now) Coxford CCG that the early diagnosis of dementia was being led by the local mental health trust (i.e. responsibility for this had passed from the WI) and that he believed this to be an ‘unexpected’ sign of a wider Coxford adoption of this as a local priority.

Despite a lack of measurable outcomes or clear successes, in the web of facilitated conversations that happened over the space of two years, individuals could be heard saying how much they learned, and reflecting upon how their ideas changed by exposure to other professionals, which in turn, allowed them to consider working differently.

## **6.5 Child and Family Services Case**

### **6.5.1 The local context prior to the WI**

Representatives of a number of children's services had been seeking ways to build connections between themselves in the local area for a long time. In 2006 one particular group co-located services in Westpark to develop more integrated and holistic care and aligned itself with the national 'Every Child Matters' mandated processes and the Common Assessment Framework (CAF) (Department for Education and Skills, 2006). But, as one participant described after years of effort in attempting to provide interdisciplinary care for children in need and their families:

**Alex SIP12L Integrated service manager:** “Integrating different professionals into a whole ... bringing social care and mental health together becomes an issue of sharing information ... this is like knitting smoke, I'm afraid.”

The death of “Baby P” and the failure in child protection afforded by NHS and children's services professionals received great attention in the media. Concerns about such care erupted again in August 2009 when the names of the baby and his killers were publicly revealed. Complex issues related to child protection - and the need for multidisciplinary

teams to share appropriate information - were a source of national concern just as this WI team's priorities were forming.

One early enabling characteristic of this team included having a leader - Francine - who was a local community matron and administrator who had come out of retirement to be involved with the WI. This individual's knowledge of the local area and ability to network across a wide range of services was an important factor in encouraging a wide range of stakeholders to attend events early in the course of the Initiative. Her extensive experience naturally led to this individual serving as an informal mentor for the other three team leaders, Vinoda, Supriya, and Sandra.

### 6.5.2 Overall Aims and Specific Objectives

The child and family health services team set themselves the following overall aim and specific objectives at the April 2010 WI event (see Table 13).

**Table 13 Aims and Objectives: Child & Family Health Services**

<b>OVERALL AIMS (as of April 2010)</b>	<b>SPECIFIC OBJECTIVES As stated in team document</b>	<b>MEASURES OF IMPACT</b>
To improve awareness and use of children and family services	<p>Need to network. Proposed actions:</p> <ol style="list-style-type: none"> <li>1) General Practice <ul style="list-style-type: none"> <li>○ Summary of services and improved referral to them</li> <li>○ Support for them to improve immunization rates</li> <li>○ Support for referrals for obesity</li> </ul> </li> <li>2) Voluntary Care <ul style="list-style-type: none"> <li>○ A way to communicate complaints about substandard performance in a way that the LHC can act on</li> </ul> </li> <li>3) Community Children Services <ul style="list-style-type: none"> <li>○ A critical assessment of the relationship with primary care and mental health services, to enable integrated working for families who suffer from anxiety and depression</li> <li>○ The development of a process of identifying children and families that can be referred to children centres to access the range of support and services available</li> </ul> </li> <li>4) Whole System Integration</li> </ol>	<p>Focus groups Results:</p> <p>Awareness of other agencies within health, social services and schools varied.</p> <p>All were confident in contacting health visitors and social workers.</p> <p>None were confident in contacting School Health Nurses and Children's Centres.</p> <p>GPs were keen to have guidelines for referral and easy</p>

	5) Gather data to reveal changing competence of the system as a whole <ul style="list-style-type: none"> <li>○ Organisational change in the way different agencies communicate through a change in newsletter circulation</li> <li>○ PCT and senior management commitment and promotion of integrated working between children's services and children's centres.</li> </ul>	self-referral.  GPs and children suggested that services should be provided in one place.  Practice based workshops allow for inclusion of practice staff
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### 6.5.3 What Happened – Case Activities

Francine [WIL1A], a former community matron was identified by Chris as a good leader for the child and family services team. She was well connected in the Westpark and Coxford areas, and she had held an administrative position. Francine worked effectively to build connections for the WI but when the small amount of funding she received to lead the team ran out in early 2011, she happily returned to retirement.

An early goal of this group (objective listed in Table 3) was to update a resource guide of local secondary, mental health, and voluntary services; this was accomplished by July 2010. Unfortunately, this resource guide was not produced in any quantity, posted online, or otherwise disseminated. A handful of hard copies was printed and brought to WI stakeholder events but did not reach a wide audience. A related, early-perceived success included talking to receptionists about disseminating the resource guides and a receptionist in one of the Westpark practices showed facility with such sign-posting. In September 2011, Chris reported that receptionist training as 'health champions' was an on-going redesign project. In an interview with Victoria, a public health trainer from Coxford, explained the origins of the project:

**Victoria [WIP38L] - Health Training Coordinator:** ... a few months ago, as part of the WI, I was contacted by Chris ... he identified three practices that were interested in having some kind of signpost-type training for their receptionists ... So with one of my staff, one of the health trainers, we developed a kind of training module ... So we did some brainstorming ourselves and with other people in the public health department about the type of things that we felt we should include in this signposting training.

## **Vignette 8 Receptionists & sign-posting: boundary spanning and idea generation**

At the beginning of a WI stakeholder meeting on an evening in November 2010 about 35 people gathered to hear about on-going efforts to improve the integration of child & family health services. Three GPs were observed coming in late - checking their telephones for text messages and looking distracted - and only slowly engaging in small group conversations during an introductions and brainstorming exercise. As a part of the agenda, a GP was invited by the child & family health services team leader to speak about making referrals to a local service that supports families with children struggling with emotional and sometimes psychological problems. He introduced his receptionist who further described their efforts:

“I personally went and visited these centres, just to have sort of contact. When patients are just sitting there you get to talking with them ... I try to incorporate this into our practice ... handing out leaflets ... pointing out posters. I was able to find a number and give it to a family to help a child.”

Within thirty minutes, all the GPs were paying attention; one was taking notes about the topic at hand, and a second was asking questions.

At a subsequent residential meeting in spring 2011, Chris - the WI founder - talked about more formal receptionist training for such sign-posting, and a public health trainer - Victoria - who was tasked with creating sign-post training for receptionists. A training module including a very wide selection of health promotional topics was developed and surgeries were contacted for training; however only three in Coxford responded and training was provided in June 2011. Time release for training was cited as a problem and practice managers were reluctant to make time to review and approve materials. Despite persistence in pursuing receptionists and practice managers for this modular training, no additional inroads were made and no practices in Westpark participated. As of early 2012, attempts to create either intranet or extranet versions of the sign-posting module were underway but not resourced with funds or personnel.

Potential team members - representing community services for school-aged children, refugees, asylum-seekers, and women struggling with domestic violence - attended various stakeholder meetings. Although some individuals continued to attend when invited to stakeholder events, they appeared motivated by opportunities to represent their own services rather than working to achieve the goals that had been set out in April 2010 (see above). Ultimately, no coherent team formed - and despite efforts to

identify a new leader for the topic by the time of the residential meeting in 2011 - the goals of the team remained amorphous and difficult to organise around. At that event, a newly appointed team leader, Charlotte [SIL24X] did not have a close professional interest in child & family health services, had no supervisory support for her involvement in the WI, and was soon formally responsible for commissioning adult services; leading on this topic did not align well with her daily work and the 'team' did not gain cohesiveness.

#### **6.5.4 Patient & Public Involvement**

Prior to the formal launch of the WI in October 2009, an organisational consultant, Richard [WS32012] was engaged by Chris in March 2009 to facilitate an interactive workshop that was widely advertised across Westpark and Coxford for anyone interested in the health and wellbeing of children and families to attend at a local community centre. At the beginning of the workshop the Westpark Community Alliance representative offered a perspective, as did a GP, but most of the two-hour workshop was spent in facilitated small group discussions. Participants were asked to describe current weaknesses and strengths in the local area, and then to envision a better Westpark five years in the future. No written minutes from this event have been traced, though user perspectives were represented in resultant events and reports. At the time, the consultant noted the number of small groups already in place locally, commenting that *"the self-organizing was just unbelievable, it was fantastic. More so than I've seen elsewhere, you know, [a neighbouring borough] has some, but Westpark was just full of them, absolutely amazing ..."* The contribution of community-centred activity in the local area was explored by the consultant, who advised that on-going efforts to engage with local community groups should be decentralised from the PCT. Interviewed as part of my research two years later, he noted that these efforts now had the PCT at the centre.

### Vignette 9 A non-clinical boundary spanner

**Stephanie [WIP19S]** is a learning and development **manager** based at the PCT educational centre. Though not connected directly to clinical services she had been approached by Chris in 2009 to help with publicising WI efforts across the borough; she continued to attend meetings through 2010 and early 2011. Stephanie describes being involved in organising training events, including trying to rollout an updated IT system (a version of RiO an electronic care records system) to ‘transform’ and connect services across the locality. She describes herself as “*wearing multiple hats*” and having “*lots of strain*” because of being ‘between two worlds and pulled in different directions’. Stephanie said, “*I see solutions others don’t see because of my position, but then I’m the last one to see the implementation plan!*”

Though never participating in the formal agenda, Stephanie felt the excitement of the WI but was not sure how she could contribute. Running training events meant that Stephanie met with all practice managers at a scheduled monthly forum, one of the few people in the local healthcare system to do so. Stephanie had the advantage of personally building relationships with the practice managers over a six year period; equality and diversity updates, accreditation updates and general information flow from practices were all part of her role. In spring 2011 Stephanie noticed changes underway and knew how important it would be to maintain communication in all directions through her bridging role:

“... the networking is crucial for things to be developed. And it’s not us against them, and that’s what I think that I’ve shown, because sometimes what would have happened is we would get the option to go into a GP’s surgery, whereas they won’t let you in as PCT staff. So we have got that particular network, which I felt was really good. I could send them an email and I would get x amount of responses back very quickly, because people know who I am.”

Stephanie also recognised how receptionists and other non-clinical staff needed to be acknowledged for their important work, something which the child and family services team of the WI attempted to do:

“And I’ve seen some of the things that they’ve done, and the improvement through going to some of the meetings that I’ve had, where the GP’s have felt, or the staff have felt that there has been a great improvement ... the receptionist to do a lot more with the patient, which meant that because of some of that work, because they know one another, the patients come in, the receptionist has the most information to give a patient. So their role becomes evolved in a sense, and it was good to see that, and I wanted, at some point, to share that with other practices, which I felt would have been really good ... I’ve felt that the receptionists, when we met with some of them that actually developed the WI, felt very honoured to actually do that role, because it was their ideas that were coming about. They were using their initiative.”

Although Stephanie and others involved in the WI recognised the potential of this way of increasing joined-up working, Stephanie also knew that she would, in all likelihood, not be the person to develop such a programme to reach out to receptionists. Stephanie was made redundant in mid -2011 and the monthly practice manager forum ceased thereafter.

### 6.5.5 Case Outcomes

The Child & Family health services team had set itself five objectives as described at the outset of the WI in April 2010. This team did not gather quantitative data to identify progress toward their goals. They struggled to define measurable goals, and lacked leadership after Francine retired. The early success in creating a community resource guide did not include evaluation criteria, such as numbers of printed copies disseminated, and no updated versions were created.

Responses to the receptionist signposting training were favourable - as Victoria describes below - but developing and delivering such training programmes is very time intensive, and the material needs to be constantly updated. Victoria was able to describe how beyond the intranet, the extranet might support such efforts but she was also realistic enough to know that staffing and funding for IT development posed a major barrier looking forward:

**Victoria [WIP38L] - Health Training Coordinator:** "... They were particularly interested about all the different resources that are available to patients. Because we were telling them about things that they weren't aware about, all these things. The other thing that came up was there's so much information, how can we get up-to-date information, how can we do that. I think one way that's sort of been addressed now is with the introduction of extranet. I mean, I've got no admin help ... Because the thing that came out to them was they wanted a general overview of the plethora of services available, because they knew about some, they didn't know about others. And there was also information about names and contact details, but I did explain to them that if you give them a name of a certain person, sometimes they leave, and I myself struggle to keep up-to-date. I mean, they felt the content was fine, most of them. But what they said was things like notification, changes to services."

## 6.6 Diabetes Case

### 6.6.1 The Local Context Prior to the WI

As a focus of clinical concern for many practitioners in different settings, diabetes is commonly recognised as a priority for integrated care initiatives. Multiple funding streams - at the local and national level - exist to support different aspects of the complex care patients with diabetes may need. However, debates were taking place about which aspects of integrated care for diabetes patients needed to be prioritised in the period leading up to the GP Commissioning White Paper in 2010.

Locally, structured educational efforts about diabetes had been in place well before the start of the WI, including a local university course and certification for practitioners designed and led by local Diabetic Specialist Nurses (and commissioned by the Coxford PCT). According to PCT documents this university course reached staff in 35 GP surgeries during the period 2004 to 2010. A dietician-led 'Right Start' course for Westpark patients also pre-existed the WI and had been offering structured sessions for patients since 2009. In the past, the PCT had also commissioned a course for practitioners on initiating insulin.

The enabling characteristics of this team included consistent leadership but barriers were a lack of mentoring support for serving in such a boundary spanning position, a lack of formal supervisory recognition for the leadership role in the WI, and work pressures to spend time on other topics (including a fear of redundancy).

### 6.6.2 Overall Aims and Specific Objectives

The diabetes team set themselves the following overall aims and specific objectives at the April 2010 WI event (see Table 14):

**Table 14 Aims and Objectives: Diabetes Case**

<b>OVERALL AIMS (as of April 2010)</b>	<b>SPECIFIC OBJECTIVES As stated in team document</b>	<b>MEASURES OF IMPACT</b>
<ul style="list-style-type: none"> <li>To examine diabetes from different</li> </ul>	<ul style="list-style-type: none"> <li>To develop an action plan by July 2010</li> <li>To consider possible areas for</li> </ul>	<ul style="list-style-type: none"> <li>HbA1C(%) &lt;7</li> <li>HbA1C (%) &lt; 10</li> </ul>



<p>perspectives.</p> <ul style="list-style-type: none"> <li>• To use a combined approach for coordinated care.</li> </ul>	<p>action in 2010:</p> <ul style="list-style-type: none"> <li>○ General Practice</li> <li>○ Out of Hours Services</li> <li>○ Hospital &amp; community services</li> <li>○ Voluntary services</li> <li>○ PCT use of IT improvements</li> </ul>	<ul style="list-style-type: none"> <li>• Rate of emergency admissions for diabetes patients with and without complications</li> </ul>
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### 6.6.3 What Happened – Case Activities

This team was the last to develop within the WI and was not initially a priority topic determined from the early stakeholder meetings. As Chris - the WI founder - talked with PCT managers and local GPs, it became clear that diabetes was a major clinical concern and a cause of numerous co-morbidities in the local population; Chris and a PCT commissioner together determined that diabetes should be a focus of quality improvements and this team was named as part of the WI in early 2010.

The 'Rapid Appraisal' document presented by the team leader in April 2010, proposed:

- using cross-practice training events for GPs
- developing Out of Hours Services
- providing hospital- and community-based care with diabetes specialist nurses.

All these ideas were acted on in some form in the next year, despite profound system changes at the PCT with leadership replacements and redundancies between 2010 and 2011.

Professionals from many disciplines involved in providing diabetic care participated in this group depending on individual availability. Additionally, there were potential multidisciplinary overlaps for discussing diabetic services at forums about other health conditions. Diabetic nurses and specialist nurses dropped in for some meetings, as did diabetic consultant specialists, general practitioners, pharmacists, dieticians and representatives from medical management. No consistent individuals could be named as a part of the 'diabetic team' for the WI although many representatives of different services were in frequent contact as a part of their formal work roles. The team leader was not able to name team 'members' and yet had almost daily meetings about

diabetes services, alongside daily work on other topics. Tense conversations between the local hospital trust and the PCT were facilitated by the team leader in her role as a commissioner of diabetes services who brought together multidisciplinary representatives to negotiate service provision by cost, locale, and provider. A specification for Intermediate Diabetes Services was initially drafted in October 2010, but progress and take-up was slow. Resistance to change was noted amongst specialists, hospitalists, and GPs. In early 2012 Supriya described this time period.

**Supriya [WIL4D] - PBC Manager:** “There have been a lot of changes in the NHS, as you know, over the last year and at that time there was a lot happening. There were meetings that we were attending where nobody knew what our future was going to be. We were in new roles, couldn’t really impact on certain things. We felt more and more distance as time went on. It started to improve, definitely it started to improve over the last two or three months, but at that time I think it was a particularly low time. Not just for me, I think a lot of people were feeling the strain.”

### Vignette 10 Developing boundary spanning leaders

**Supriya [WIL4D]**, is a **commissioner** at the trust and the **leader** of the diabetes case. She worked at Coxford PCT in middle management; although not a clinician, she had a background in scientific research. Part of her remit included overseeing diabetes services across the PCT. Encouraged by the founder of the WI to take part, she was nervous about public presentations and uncertain about her leadership skills, but consistently took part in WI events.

In the summer of 2011 Supriya began to write in her diary about the sense of reaching a 'tipping-point' and that there was now more interest in the notion of community-based diabetes services. During this time, Supriya reflected in her diary about recent personal and professional experiences which had broadened her perspective of the need diabetic patients have for integrated services. At the same time, her line manager commented that her 'pseudo-leadership role in the team' was probably not associated with 'her personal development priorities', although that was his view of her and of the change model underpinning the WI.

In September 2011 Supriya was observed leading a meeting of different disciplinary representatives (including the district nursing service (DNS) and podiatry) who appeared to be frustrated by a lack of change, noting on-going bureaucracy. Supriya demonstrated a calm positive manner while listening to these concerns and offered an optimistic plan towards progress; a similar experience was reflected upon in her diary a month prior to this, demonstrating an increasingly reflective stance and on-going personal development. A few days later Supriya noted that this conversation at the multidisciplinary meeting had prompted a number of further cross-boundary interactions which led to two new shifts in attitude from outside the usual team. Within a few days she had received calls from two previously resistant people, one a DNS at the hospital and the other a GP from the newly formed local CCG, both asking how they could move the diabetes work forward to improve care in the primary care setting. As Supriya said at the time: *'This is now a new level of integration and working is amazingly different ... in a good way!'*

A borough-wide training event on the topic of diabetes was held on 3rd February 2011 and very well attended by GPs. Another ripple of success was noted when the previously resistant diabetic specialist attended the third residential conference in April 2011 after never attending previous events despite multiple invitations to various multidisciplinary discussions. At this event, as part of multidisciplinary team, the

diabetologist declared - for the first time - a strong interest in moving diabetes care into the community; this shift in attitude was noted by many in the WI.

Additionally, 21 surgeries were involved in training through the national UK programme Year of Care (YOC) by attending at least one of three sponsored events in late 2011. In 2011, a university hospital-based pilot was initiated in 14 collaborating GP surgeries in the borough (as part of the Diabetes Year of Care programme). The team leader spoke of her confidence and ability to provide evidence of significant involvement in the WI, to support her request as a commissioner to involve the PCT in the pilot. And another hard-won success was accomplished when, despite many stops and starts, a once-weekly diabetic clinic staffed by diabetic specialist nurses was started in a community setting in the borough (although not Westpark) in early 2012. By autumn 2012, two more community-based diabetic clinics had been opened in Westpark; Supriya attended a UK-wide GP conference and her poster on integrating diabetes services won the top award.

#### **6.6.4 Patient & Public Involvement**

Through Diabetes UK there was an effort to *hear* patient perspectives and to encourage self-management. However, as a part of the WI patients were not directly observed as participating at events.

#### **6.6.5 Case Outcomes**

At the outset of their involvement in the WI the diabetes team had set themselves two very broad objectives (see Table 12 earlier) but three specific measures of impact which I report on below. Chris reported to the forming commissioning group in September 2011 that the achievement of the WI diabetes team was that 14 GP practices had collaborated to improve diabetes and participate in the Diabetes Year of care, as jointly led by the hospital and the Coxford PCT.

### 6.6.6 Diabetes Patient and Carer Focus Group

A focus group of diabetic patients from Westpark was held in February 2012. Seven people participated (see Section 5.4.5: Table 4 and Table 6). The study information sheet was reviewed, questions regarding ethics were discussed, and participants were given opportunity to ask questions prior to signing the consent form. The session was recorded, transcribed, and analysed for themes. The participants sat in a circle and introduced themselves, saying how long they had diabetes, and most admitted that they also cared for family members with diabetes. Six had type 2 diabetes, one had type 1 diabetes, five were women, two were men, and all were of Asian background.

Getting care all in one place, and increasing their own understanding of the disease were important themes early in the group discussion:

**FG1DM05** “... say six, seven years back, everybody was called for an annual check-up at Coxford Hospital. And then they discharged everybody and said, ‘You’ll have to go back to your local GP. They will be taking up your case, and then call you in for your check-up.’ Then any blood tests that need to be done, it was done there. In one way it’s convenient, rather than going to the hospital and waiting long. Here they give you an appointment, and then you do your tests, and you get your results. I think it’s the way forward. But what they’ve added is diabetic retinopathy, so that helps.”

**FG1DM01** “They’ve given us little leaflets to look after ourselves now with all the results of all our bloods, which is really good because you can see where you are, which before I didn’t know what anything was.”

This same individual had had diabetes for 12 years, and she talked about taking a short course at the Coxford Hospital two years ago (prior to the WI). Learning about food and diabetes had been helpful for her. She went on to describe the importance of quick access to the specialist nurses, and how that helped coping with the stigma of the disease:

**FG1DM01** “But it was really, really good. I learnt so much information, we were able to share experiences, like this doesn’t happen. And I think initially when I was diagnosed, Indian society, being diabetic, being Type 1 diabetic, oh, God forbid. God forbid you ever tell anyone. So it was absolutely disgusting.... Yeah. So it’s completely taboo, and it’s a shame, because now in current society people still don’t talk about it, especially because in Indian culture it’s a happening thing, it’s happening more and more. So it’s a shame. So I wasn’t able to speak to really my family other than my immediate family when I was first diagnosed. But the diabetic nurses at Coxford Hospital were absolutely amazing. I could ring them whenever I wanted, I could go and visit them any day of the week. Their offices were always open. I couldn’t see the doctor necessarily... It’s stayed consistent. If I want to go and see them, if I want to make an appointment, they’re always at the end of the phone. I think that’s really, really nice.”

However, as the group continued to talk, it became clear that the care was felt to be more responsive through the hospital, for the patient with type 1 diabetes than for the type 2 diabetics in the group who found the care to be less timely:

**FG1DM05** “...Type 2, it’s probably a bit different, because it was the hospital, they saw you annually, and that’s it.... And if there’s any changes, for example, you know when they did the blood test for you, ‘Oh, your cholesterol has gone up. Oh, well, we’ll recommend you tablets, and then refer you back to your GP.’ And they would say... They would get the message, but not immediately. They would call you after about a month or two and say...”

Others in the group agree that the connections between the hospital and the GPs seem to work at different speeds. When medication was being changed then time to contact was, appropriately, swift but unfortunately, not always informative:

**FG1DM02** “... Almost immediately. They always call me up, and it is almost immediate. They’ll call you in, get you a prescription. But the thing is, they don’t explain it. When I go to my NHS consultant, when he’s looking up my blood test, I like to be informed of what the changes are, even if it is every three months. I like to know. Just like you say, there is no support. When I got diagnosed, I had a really bad experience as well six years ago. And I had all the symptoms, all the symptoms that a diabetic could have had, and it was crystal clear. But I wasn’t able to get diagnosed by my GP however many times I came in. It was over a three-month period that I was having these symptoms. So it was at a time when they didn’t really have all these monitors. I think it was about a year back when they started to introduce them, there was a big hype about all these local afternoon clinics, and they were saying, well, okay, a lot of them had free testing monitors being given out to them before these budget cuts.”

The participants had heard that diabetes rates were increasing in the local area and remembered that free testing monitors were frequently offered in the time-period before the budget cuts, but their view was that education and support were now harder to find:

**FG1DM02** “But nobody has got any information or support anywhere. Like she said, when she was first diagnosed, there’s not anywhere that... I had to literally do all of my reading on the internet. Diabetes... I got more information off the internet than I did from any of the medical professionals..... I go to diabetes.co.uk.”

As the type 2 diabetics noted the shift in their services back to the GP surgery, they also begin to describe their lack of confidence in the GP surgery nurse (as opposed to the diabetic specialist nurses based at the hospital). Five of the participants discussed recognizing the lack of competence and continuity in their care provided at the surgery:

**FG1DM02** “She hasn’t got a clue.”

**FG1DM06** “Oh, I don’t come to see the nurse at the GP. I refuse to. I would much rather go to the hospital... I wouldn’t come here. But they don’t give you your prescription unless you have been to see them. So you are actually forced to come...”

**FG1DM05** “Go to the hospital. She will do the basics, get your weight, see your feet, check your blood pressure, check your weight, and that’s about it, and everything on the system.”

**FG1DM02** “She actually turned round to me once and said, ‘I don’t know why you’re coming here if you’re under hospital care.’ She’s not very informative. She doesn’t know, she hasn’t got much knowledge in the field of diabetes. You need specialist care.”

**FG1DM01** “It’s very hard to get hold of her, she doesn’t do evenings. So my husband’s work, he has to take a lot of time off.”

In this manner, patients appear to be able to discern the difference between attentive service at a convenient location, and that they will self-select their care, if able, to the place that they perceive care to be the best. In addition, they verbalised being able to recognise, and prefer, specialty trained practitioners:

**FG1DM06** “Yeah. See, they were really, really good, and you could ask questions and they actually knew, and there was a bit of banter going. It was alright. But I think with the nurse that they currently have, with me, I’ve got a running joke with the receptionist because I refuse to see her. She doesn’t even ask for me anymore because I won’t. But there are some really good nurses out there who actually do know about these conditions.”

**FG1DM05** “Can I just tell you, when [the previous doctor] was there, he had some very good nurses and staff. They were dedicated diabetic nurses.”

**FG1DM02** “That had trained knowledge on it.”

As a group of diabetics with many years of experience, they were able to list the kinds of care that they knew they should have, including blood pressure and weight monitoring, eye and kidney screening. They discussed how regular screening may have decreased recently, especially with the move of services back to primary care.

**FG1DM02** “They used to do your weight...Urine test they used to use, the little stick test thing for proteins. They used to do quite a bit, actually. It’s been a while now.”

The patients spoke about understanding the risk of hypoglycemia and the way to treat it quickly with sugar, as well as the importance of having their eyes checked regularly. Two participants confirmed that their optician also checked their blood sugar and referred them back to their GP. The rest in the group were impressed, and they began to share names of local opticians.

Making connections between services was recognised by the patients as important but not as efficient as it should be;

**FG1DM06** “There was going to be a centralised database system, wasn’t there? I think that would be one step in the right direction. I know that there’s all these data protection laws and loads of negativity about it. But I think in respect of us getting the care that we deserve, everyone needs to have the same information. The last two times I’ve been to the hospital, they have written to me and CC’d in the GP. They’ve written a letter to tell them the results and what was discussed and stuff like that.”

The WI - and many other quality improvement efforts - have attempted to use IT solutions to co-ordinate care but the patients in this focus group had not noticed more seamless services:



**FG1DM06** “No, just about what was discussed and what my results were, because usually what used to happen was when I was going to come and see the nurse here, reluctantly, she would also send me for another blood test. And obviously I don’t have time to go out, I’m a teacher, I can’t go during term time. So there was no time. But if I’ve already had a blood test there the week before, then surely they should be able to have a look at the results here.... There’s not enough communication, and it’s an inconvenience against me. If something is wrong with you... I mean, because you could use any hospital A&E. Somebody needs to know. They could get into all of your medical records that way, knowing exactly what your past history is as well.”

When asked how to solve the problem of better integration of services, three of the patients suggested they would prefer specialist care and that they believed that the hospital was where that had happened best in the past. They acknowledged recent national policy changes (e.g. GP commissioning), and the pressures of budget cuts – but they also knew how they would like care to be provided:

**FG1DM02** “The step should be, like they say, like look, all the Type 2s, they’re all coming to the GPs, but they’re all complaining. They’re not getting the care that they should do. So okay, you’re going to give it to the hospitals, get more consultants in there, people that know their job, know what they need, rather than have it shared here and them not know and still having to go back up to hospital to get it from the consultant. So take it off of the GPs and leave it with the hospitals where they can get their feet and their sugars and whatever they need done. I would never come to my GP. I would not be in care like they would be in care. No, they gave me the alternative, but I stayed at hospital.”

**FG1DM05** “How you look at the doctors is generic. He is the first port of call, he has limited knowledge - I don’t know, I might be wrong. If he thinks, yes, you’ve said that, or you have some stomach problem, he’ll try to advise you and give you medication. But when it gets a bit complicated, he has to refer you to somebody specialist. That’s how they are taught. If your white blood cells are higher than normal, he can’t do anything.”

The participants were able to understand the difficulty in determining transitions in care between generalist and specialist services. They also discussed which healthcare staff were the most informative and how to get more information about their own lab results. It was clear that there was no preferred discipline – whether consultant or pharmacist, doctor or nurse - but there was a consensus that they looked for practitioners who listened, explained, and were readily available.

The participants also discussed the importance of receiving what they deemed to be comprehensive care - as six of the group spoke excitedly about getting a 'full annual exam' in India, with a body scan, a stool test, and a full written report for £40-£50. All agreed that this type of annual check is desirable, but unfortunate that their UK physicians would not review the reports with them upon return.

Good information is key for the patients. When discussing the use of the internet for finding information about their disease, the patients were glad to be able to find good information but they were not directed towards certain websites;

**FG1DM02** "Pamphlets, leaflets, information sheets, somewhere to go, someone we can ring, someone who you can... Not from people without having to do it myself....You figure it out on your own. Yeah, who's going to look and find for the older generation, toddling about on the internet?"

As the focus group wrapped up the participants began to comment about the hour as if it was a support group, and how helpful such an experience can be.

**FG1DM02** "It's the first time I've been able to talk about it."

**FG1DM06** "This should happen more I think in the community, it should, because there are so many diabetics..."

The participants also asked about the study and some appeared to hope that that such discussions would continue, as they acknowledged the benefits of bringing patients together to share experiences.

## **6.7 Summary Results – Cross Case Comparison**

### **6.7.1 Comparison of Outcomes**

Achieving predetermined objectives is most frequently the way impact is determined for teams working together across time. As an iterative project the WI did not compel each of the four cases to have an equivalent and pre-set list of demarcated tasks to accomplish, nor was this was an interventional study. However, each of the multidisciplinary teams attempted to set and achieve goals, while being motivated by an overall vision to accomplish integration - this was apparent, though different in each

case. In the next two tables, the four cases are compared to each other by their boundary spanning and level of integration goals – and how they would reach their outcomes.

Table 15 compares the two multi-disciplinary groups working in mental health. According to their own documentation, each of these two cases described their goals differently: by the perceived boundary to cross, their horizontal and vertical goals, and the interventions they chose to put in place. Likewise, staff in each case chose their own measures of impact.

**Table 15 Pair Comparison 1: Goals Interventions and Measures**

Case Comparison: Goals, Interventions & Measures		
CASE	ANXIETY & DEPRESSION in BME populations	DEMENTIA
<b>BOUNDARY to be Crossed</b>	Primary Care – Mental Health	Primary Care – Social Care
<b>HORIZONTAL Goal</b>	<ul style="list-style-type: none"> <li>➤ Increase patient self-referrals</li> <li>➤ Improve appropriateness of GP referrals</li> <li>➤ Increase general awareness</li> </ul>	<ul style="list-style-type: none"> <li>➤ Produce early referral guidelines</li> <li>➤ Improve dementia care</li> <li>➤ Help clients know when to see GP</li> </ul>
<b>VERTICAL Goal</b>	Decrease Acute Admissions	Increase GP awareness of Memory Loss Assessment /Clinics
<b>Case- based Interventions</b>	<ul style="list-style-type: none"> <li>• GP surgery staff Info sessions</li> <li>• MH Link Worker at surgeries</li> <li>• Public: Radio, Poster, Flyers</li> <li>• Community Info Sessions</li> <li>• Cluster GP practices</li> </ul>	<ul style="list-style-type: none"> <li>• Educational workshop GP staff</li> <li>• Translate Mini Mental Status</li> <li>• Up-skill a Nurse in Community</li> <li>• Psychiatrist mobile # available</li> <li>• Attempt to restructure services</li> </ul>
<b>TEAM-designed MEASURES of Impact</b>	<ul style="list-style-type: none"> <li>➤ Referral Rates by location, GP practice, patient ethnicity</li> <li>➤ GP QOF measures</li> </ul>	<ul style="list-style-type: none"> <li>➤ Referral rates to memory clinic</li> <li>➤ Increase satisfaction with local mental health trust</li> </ul>

In the table above, the anxiety and depression case defined a goal of increased patient self-referral rates (particularly in the Asian population and from the GP surgery setting); as highlighted in green, they were able to measure referral rates and were able to see these rates increase over time. Due to the IAPT policies such data was already being collected within the well-being service. In contrast the dementia case set a goal of

improving dementia care and increasing awareness. They set a measure of impact for themselves as 'increasing satisfaction' with the trust (highlighted in red). In this case the vision was very broad, and the level of impact was difficult to measure. If satisfaction with the trust, or referral rates to the memory clinic were being collected as data, the members of this case did not have access to such reports. Correspondingly, the dementia case appeared to have negligible impact, either from lack of attainable goals, or inability to align measures with actual effort.

In Table 16 the diabetes, and child and family services, cases are compared in the same manner.

**Table 16 Pair Comparison 2: Goals Interventions and Measures**

Case Comparison: Goals, Interventions & Measures		
CASE	DIABETES	CHILD & FAMILY Services
<b>BOUNDARY to be Crossed</b>	Primary Care – Hospital/Specialist	Primary Care – Community
<b>HORIZONTAL Goal</b>	➤ Expand links between 6 pilot practices in Westpark and wider Coxford	➤ Recognize view of well informed voluntary groups/local centres. ➤ Increase GP awareness of need to promote self referral through receptionists
<b>VERTICAL Goal</b>	Link with hospital-led diabetes care pathway improvements	n/a
<b>Case- based Interventions</b>	<ul style="list-style-type: none"> <li>• 2 Workshops with patients</li> <li>• Weekly/ Monthly meetings</li> <li>• Specialist Diabetic Clinic</li> <li>• Continued work with Diabetic Specialist Nurses</li> <li>• Train GP practice staff</li> </ul>	<ul style="list-style-type: none"> <li>• Develop Directory for GP staff.</li> <li>• Support local programmes for obesity and educational support</li> <li>• Support ideas for improvement.</li> <li>• Support Receptionists to keep up to date/ hand out literature.</li> </ul>
<b>TEAM-designed MEASURES of Impact</b>	<ul style="list-style-type: none"> <li>➤ Develop strategic links</li> <li>➤ Scrutinize QOF measures, identify exceptions</li> <li>➤ Improve HgA1c scores</li> </ul>	<ul style="list-style-type: none"> <li>➤ Visit /befriend support services</li> <li>➤ Invite leaders to collaborate.</li> <li>➤ Increase referrals to local programmes</li> </ul>

The diabetes case was more successful in reaching broad goals of build strategic links by initiating regular meetings and trainings. Led by a commissioning manager, this case had the ability to acquire funds for training sessions and foreknowledge of what

data sets (such as the quality outcomes framework (QOF)) were already accessible. The political will and remit to integrate services formed a foundation of the leader's effort. In contrast, the child and family services case had more broad based goals related increasing awareness of local support program. Although a few receptionists at GP surgeries did use a local directory to inform patients about services in the community, the ability to set and monitor wide-reaching goals was very limited.

### **6.7.2 Knowledge Movement across Cases**

Facilitated learning events provided empowering professional socialisation for participants of all four teams, which helped tacit knowledge cross individual, organisational and sectoral boundaries. Missed opportunities for sharing expertise was observed in all contexts, noting that mentored team meetings, flexible meeting agendas, and appropriate goal setting was crucial to move tacit knowledge across boundaries and surface integrating solutions through combination and dialogue. Socialisation and charismatic leadership was not enough to impact integration. Barriers to exchanging both tacit and explicit knowledge included practice managers functioning as gatekeepers, supervisor's adaptive style, competing accountability concerns, and political (and financial) imbalances. Explicit knowledge exchange through construction of products and introduction of systemised solutions was noted in the Anxiety & Depression, Diabetes, and Child & Family Services cases, particularly where enabled by external resources (including funding). The Anxiety & Depression case had a well-defined goal (from national guidelines) of increasing referrals to talk therapy, which was measurable, and achieved. The Diabetes case achieved vertical integration with the opening of community-based clinics staffed by Diabetic Nurse Specialists. These two teams also demonstrated movement of explicit knowledge to internalised tacit knowledge, which routinised integrating solutions for more chance of lasting success. Only limited knowledge exchange was accomplished through informational sessions and leaflets by the two remaining teams, as the Dementia and Child & Family Services cases struggled to make any lasting links between general practice and secondary

care. It is a concern that the ability to repeat these lessons on a larger scale did not appear very likely, particularly when redundancies and reorganisations were experienced in the local context, which impeded horizontal integration efforts by these teams. Policy-makers who have called for better integration, have said that it needs to be delivered “at scale”, that is, across large populations with the flexibility to adapt to local needs that are different in different areas (Goodwin, 2012, p.2). The model of integration, and knowledge transfer demonstrated in the four cases, would not be easily replicated.

In all four cases, the teams struggled to define meaningful measures to link their integration goals with patient outcomes, and all experienced top-down pressures to use quantitative national measures, despite being deemed too insensitive to judge impact of integration on patient care. The Anxiety & Depression case had the most ability to embed reflection in their daily practice, more ability to surface innovative local solutions, and the benefit of funding for routinised team-building activities. Persistent mentoring and routine learning sets about embedding data collection in practice was a necessary though time-consuming factor in leading quality improvement efforts, especially by those cases attempting new local methods of integration.

## **CHAPTER 7 Results – Stakeholder Perspectives Over Time**

### **7.1 Introduction**

In this chapter, I consider the results from the stakeholder perspective. For the purposes of this study I define stakeholder as the participants did – both staff and patients. In Section 7.2, narrative extracts from serial diaries are presented to provide a longitudinal view of how staff participants saw their own boundary spanning activities over time. Section 7.3 addresses the level of patient and public involvement in the Westpark Initiative. In Section 7.4, the management perspective of the impact of the Westpark Initiative is presented. In Section 7.5, boundary spanning preconditions, enablers and barriers are outlined, as drawn from the coded interview data with stakeholders.

### **7.2 Staff Participant Diaries**

Chapter 6 described the specific stories of each of the four boundary spanning teams. Here, I turn to the experiences of the individual boundary spanners who participated in the WI and provide an in-depth qualitative analysis of detailed examples from two participants who completed four sequential diaries and a follow-up interview: one from the Anxiety & Depression in BME populations' case (see Section 7.2.1) and the other from the diabetes case (see Section 7.2.2). Whilst data was collected from other diarists, in these in-depth presentations I use the continuous nature of the sequential diaries to present rich ethnographic material in holistic perspective.

Over all the diaries, interactions with primary healthcare professionals were the most common report by diary participants from each of the four topic areas (although numbers of interactions with patient/carers were also high for the anxiety & depression in BME populations team, and with social care for the child & family health services team). The 36 diaries recorded a total of 290 interactions and, overall, participants reported approximately 8 interactions as a result of their efforts as part of the WI in each two week period for which they completed a diary; diabetes team members

reported the highest number of interactions (10.6) (Nasir, et al., 2013). As that quantitative analysis of the diaries is presented elsewhere in a published report, I turn here to consider the narrative results.

### **7.2.1 Diary example 1: Anxiety and Depression in the BME population**

Pam [WIP10J] is a CBT therapist and WI team member of the anxiety & depression group. An active member throughout the study period, she agreed to be interviewed twice, and completed four diaries, enthusiastically taking part in all research activities. She had worked as an office worker at a health insurance provider prior to becoming a therapist and was now proud to be working as a mental health link worker with patients at a Westpark general practice, which was close to home. She completed four online diaries across 14 weeks in the summer of 2011 and her follow-up interview was completed in September 2011.

In June 2011, Pam wrote about how important ‘instant’ interactions between primary care colleagues were, particularly in the form of phone calls, emails, and regular meetings between herself and her supervisor to discuss complex patient cases. Pam described improved sharing of knowledge relating to referral pathways, especially making connections with secondary care. However, she was frustrated at having to overcome last minute cancellations and poor coordination by practice managers, as well as having to travel for supervision (which meant she lost patient care time and missed targets). As Pam wrote in her first diary, her motivation increased after effective meetings to inform GPs about local services:



**Pam [WIP10J] – CBT Therapist:** “Really exciting that last week I was able to arrange a meeting with GP's and dementia services from secondary care, which took place where I work. It was exciting as Dementia services have been trying for many years to get a step in the door but have been unsuccessful due to time pressures and non-responsive practice managers ... We were successful in increasing dementia awareness to a total of 8 GP's. They found the presentation interesting, informative and as a result many questions from both sides were clarified and resolved. The meeting has also opened up a whole new dialogue on how dementia services can cross refer care for people diagnosed with dementia to Mental Health services for support. As a result we are now in the process of arranging workshops for both mental health and dementia services.”

As a part of the work of her WI team, Pam and others had systematically visited GPs in Westpark to talk about mental health. Through these interactions they were able to recognise how services could be made more seamless:

**Pam [WIP10J] – CBT Therapist:** “What would happen ordinarily is a client may be just referred for depression, we do the assessment and find out that actually it's much more severe than actually meets the criteria for primary care setting. So we have now been working very much closely with the secondary care partner to ensure that if we detect there is more severity to that case then we refer accordingly to secondary care services. It's increased much more in the last year or year and a half now ... I find the need to be talking to secondary care services much more than I would previously.”

In July, Pam again wrote about making connections with dementia services for a patient, and reports increased exchanges across professional boundaries:

**Pam [WIP10J] – CBT Therapist:** “Contact with dementia services in [a different borough] due to the fact that the client I was seeing resided in that borough. As she did not fit the post code criteria which would enable her to be seeing by dementia services in Coxford, making contact with another borough's dementia services meant I was able to find out their referral process, where they were located and then were able to do a referral on to their department. The client is now doing well and is under the correct medication for working age dementia and care. This has also allowed me to share this information with other colleagues within my team should they need to do a referral.”

Unfortunately, her personal motivation was negatively affected by a lack of follow through by her clinical supervisor.

**Pam [WIP10J] – CBT Therapist:** “I have been trying to apply for accreditation and my clinical supervisor has still not completed her reference which has now taken a total of 7 months, something which could have been completed in 2-3 weeks. This makes me feel extremely frustrated and angry. I feel that as a team my personal development issues are being brushed aside and this can create a feeling of being demoralised and unappreciated.”

In August, further new connections were made with child and family services area and with voluntary services. At this time, Pam did not report many boundaries being crossed, and she did not report feeling very motivated but she did have a new appreciation for issues related to safeguarding:

**Pam [WIP10J] – CBT Therapist:** “In particular I have spoken with [local child & family support organisation] to help a client deal with domestic violence which is having an impact on the children. This has now been successfully done and [they] are in the process of offering her an appointment next week. I feel knowing what agencies are out there and what they do is really crucial so that we are able to provide the correct intervention for our clients. This was the first time I have actually worked with [this organisation] which helps families with support and difficulties they may be experiencing.”

Having written about how much she learned experientially about safeguarding, in her follow-up interview she further described the challenge of bridging gaps in services and her frustration at how inefficiencies affected her own work targets:

**Pam [WIP10J] – CBT Therapist:** “I didn’t have the information to hand. I then had to rely upon other health professionals, but what I found wasn’t a seamless process. I phoned one person, they didn’t know. Phoned another person, they said, ‘Oh they’re not in.’ Phoned another person who said, ‘Can you call back later?’ Phoned somebody else... It was that kind of attitude. There should be somebody there at the end of the line. Then I phoned safeguarding, they gave me information which was not coinciding with what information the police had given me around safeguarding issues and sexual abuse. So there’s miscommunication for clarity of what should be done and what is the right protocol to follow, and that causes a lot of frustration when you have time limits placed upon you ... A lot of time had been spent, wasted time, calling other health professionals who weren’t able to actually give me the kind of information I needed to be able to deal with it in an efficient, effective and fast manner ...”

Underlying this narrative is Pam’s concern for patient safety, which motivates a desire for improvement, which seems to add to her increasing frustration which paths are not clear. In September, Pam reported making further new links with dementia services, contacts across sectoral boundaries, and reported confidence that her boundary

spanning efforts were making a difference, especially on quality of care. Spanning boundaries however was not easy:

**Pam [WIP10J] – CBT Therapist:** “I have been trying to speak with a consultant in secondary care regarding a client I am seeing but find the process of leaving messages, returning phone calls and missing each other due to client contact rather frustrating. This often means that there is either a delay in referring on or progressing with treatment.”

Pam learned new skills through cross-boundary working as part of the WI, which became crucial. Pam was able to describe the kind of flexibility needed by a boundary spanner to apply her professional skills but she also notes how supervision can serve as a barrier instead of support:

**Pam [WIP10J] – CBT Therapist:** “I would think that sometimes if we can use our judgment and make that decision ourselves rather than having to duplicate. Again, there was the waste of a whole afternoon when I know that this client was quite clearly not able to function and look after themselves, because all they could think of was about killing themselves, taking tablets, going to the park and drinking, and that’s it. So if I know that this person needs to be looked after by secondary care as an inpatient, why then did I have to go to the local community mental health trust, go through all that rigmarole, go through all the assessment, and then find out they still ended up as an inpatient?”

The frustration felt by individual boundary spanners attempting to close gaps in patient care can come at a cost to the healthcare professional, and risks undermining the quality of patient care, as Pam dramatically describes:

**Pam [WIP10J] – CBT Therapist:** “If you look at our targets, it’s more so now that we’re working so hard to meet deadlines, and if we don’t meet our deadlines at the end of the week then there’re questions asked, ‘What were you doing? Why weren’t you able to do it?’ They’re not going to see that as justified. They’re going to say, ‘Well, you’re supposed to be achieving twenty hours, the rest of it doesn’t matter’ ... Today I’ve been running around after a risk client. He sent me a text this morning saying, ‘I’m going to stab myself to death.’ When you hear that, everything else becomes irrelevant, so you want to make sure that a client is looked after. In total, in between clients, I’ve had to spend an hour and a half trying to locate the client, phoning the police, getting the police and ambulance services to her home address. All of that takes time, but when I report my schedules at the end of the week they’re going to say, ‘What were you doing for two hours of that day when you could have been seeing a client?’ Are they going to understand that I was trying to look after the welfare and safety of the client because they were threatening to stab themselves?”

In noting how targets now drive her work, Pam explained that as pressure to meet targets increased in January 2011, her work in making linkages happen had decreased, and the impact would be on referral rates:

**Pam [WIP10J] – CBT Therapist:** “One of the key things that came up was the fact that because now we’ve all been faced with targets, our promotional GP liaison work and promoting the service has gone rock bottom ... Actually if we don’t continue promoting the service and increasing awareness about what we’re doing that the referrals are going to start decreasing, which is evident, that’s what’s happened, the referral rates have gone down.”

Pam is able to see that the boundary spanning activity of promoting services – especially horizontally across different organisations - is at risk when supervision too tightly controls a professional’s time and daily work.

### 7.2.2 Diary example 2: Diabetes

**Supriya [WIL4D]** is a practice-based commissioner based at Coxford PCT and leader of the diabetes team in the WI. An active member throughout the study period, she agreed to be interviewed twice, and completed four diaries, enthusiastically taking part in all research activities. She has a scientific background in research, but is not a clinician. Among other clinical topics, she had been assigned responsibility for commissioning diabetes services, which includes negotiating contracts between primary care and secondary services and the hospital. She completed four handwritten diaries across 10 weeks in the summer of 2011 and her follow-up interview was completed in January 2012.

In early June 2011 in her first diary, Supriya writes about crossing many organisational and professional boundaries, and although none were new contacts she reported feeling very confident about the impact of her boundary spanning work on the quality of patient care. Involvement with Diabetes UK and the Year of Care (YOC) pilot (with the Department of Health, The Health Foundation and the National Diabetes Support Team) was a part of her work during this time. Supriya reported that the recent training by YOC for GPs went well and that she ‘had some really good interactions with some

GPs'. Supriya was also excited to have improved connections with individuals and community group representatives in the local area. Increasing disease awareness and motivating self-care for patients with diabetes are important aspects of evidence-based diabetes care and Supriya had become aware of the need to bring these concepts to both patients and practitioners:

**Supriya [WIL4D]:** "Patients in the WI and through the LINKs meeting I was presenting at, all said getting their [diabetes] results in advance and being involved in the decision-making is a really positive way forward and welcomed by the patients and carers. LINKs were really happy to be involved in any way they can to support the diabetes work stream."

In her follow-up interview Supriya felt that her sense of confidence on impacting patient care was related to increasing her own knowledge through working with a diverse group professionals across multiple organisations and as she provided training for local clinicians.

In her work as a commissioner of diabetes services, Supriya knew that efforts to link up services were an important way to improve care across the borough as she outlines in one of her diaries:

**Supriya [WIL4D]:** "I have had fantastic meetings with public health ... 1) following from previous discussions, the new public health lead for LTCs and Active Lifestyles has arranged for a pilot on educating children at some local schools on diabetes, following the work done with asthma project. I pointed out the people that should be involved with this, including the paediatric diabetic specialist nurse and the public health lead identified school nurses, health visitors etc. from social services; 2) the same public health lead has also agreed to put together a pack for each practice with information on different leaflets and how to get them, with recommendations on which leaflets are best for which type of patients; 3) I am also going to get the public health lead to talk to LINKs to review the leaflets for YOC and simplify them and then translate them into other languages; 4) I have also met another public health lead who is working on putting a training package together for receptionists and healthcare assistants to do sign posting and deliver health promotion and prevention advice at GP practice."

Later in June, in the second diary, Supriya mentions an important need for collaboration with a diabetologist to bring services into the community. She also mentioned frustrations with influential senior individuals who she perceived as being quite obstructive. However, she also writes about progress in making connections:

**Supriya [WIL4D]:** "Two really exciting meetings have been with the consultant diabetologist at the Coxford Hospital and another meeting with a practice in [the north]. The diabetologist has been very indifferent to the commissioning direction for diabetes care for the last year but he has changed his approach. I hope he is being genuine and this is not just a way of getting what he want ... There are frustrations in that the information governance team at the hospital are not willing to share the data. But the diabetologist is trying to get the green light himself. This data will help us determine how much money can be released from secondary care to reinvest back into primary care and community services."

At the spring residential retreat, Supriya was able to meet face to face with this diabetologist, and her summer diaries confirm progress in sharing data between the primary care and acute trusts. Unfortunately by the time she was interviewed this interaction had not proved to be as productive as had been hoped, particularly in a lack of sharing of client data (including information related to list size and services rendered) held at the hospital.

In this third diary, Supriya also reported feeling pressurised by a pharmacist who did not think she should be leading on a clinical topic - such sentiments had been verbalised before - frustrating her commitment to improving services.

Patient and public involvement (PPI) is crucial for a commissioner working to policy guidelines, and Supriya was keenly aware of this perspective and its importance in serving local improvement efforts:

**Supriya [WIL4D]:** "It's given me the backing I needed. Because just very recently I was challenged on all the assumptions and the direction of travel that we're taking with diabetes at the care committee and the clinical commissioning executive committee when I was asked, 'What patient engagement have you done?' And I was able to say, 'We've done this huge event,' and I was able to follow that up with an email with Diabetes UK and they came back immediately saying, 'Yes, we know you've done a lot already.'"

In the follow-up interview, Supriya described how she had gained understanding of the patient perspective at a local WI event in the autumn 2010:

**Supriya [WIL4D]:** “We had a really multicultural group of patients attending, and carers, and they all knew exactly when was wrong with the system and what would help them manage themselves. What type of information they needed, what type ... they even mentioned things that we hadn’t even thought of like - or we had thought of but didn’t think it was important to them - cooking for family members rather than for themselves ... And they knew exactly what they wanted. They knew what they wanted from GPs, they knew what they wanted from the hospital, they knew that they didn’t want to go to hospital full-stop, they preferred to just manage themselves.”

Supriya gained that perspective through the Initiative and it influenced her efforts to bridge gaps between services. This also enabled her to make a successful bid for involvement in the Year of Care (YOC) and other funded pilots, outcomes, which Supriya attributed to the WI:

**Supriya [WIL4D]:** “And with the evidence that I had from the patient engagement and that I could ask we won the bid and we were able to launch Year of Care. So we’ve had 12 practices trained and this year we plan to get everybody else trained. So quite a significant amount of work has come from that patient engagement... The patients that we invited were invited from the six groups of practices that were working specially on diabetes in the WI. And it was one of the outcomes that we wanted to achieve from the WI.”

Gathering downstream evidence of the impact of PPI is rarely easy, but for Supriya it has had an important effect on enabling integration.

In her final diary, Supriya writes about overall progress on the topic of diabetes:

**Supriya [WIL4D]:** “The practice nurses were already making good progress on YOC and knew all of their patients. I felt they were so good that they could be a leader and local trainer for YOC. One has agreed. I also had a meeting with the diabetes implementation team. The first of a series, looking to work in the same way as the WI. The focus will be to develop a practice pack with information on what services are available ... During one evening I was contacted by a GP in [a neighbouring borough] who was working on the integrated care pilot ... to ask more about YOC. That felt good that I as being contacted about the project I was working on from another area.”

Learning from past efforts became incorporated into the method of moving forward, and despite many hurdles and hesitations, the outcome of finally realising a community-based holistic diabetic clinic in Coxford was accomplished in early 2012, with two more clinics in the community in Westpark by late 2012. GP commissioners,

diabetologists, and specialist nurses had begun to align ways to bring diabetic care out of the hospital and into a specific community setting, and to agree how to fund such efforts. At the same time, details of how to incorporate dieticians, podiatry, and other disciplines were still being negotiated. At this point in time, Supriya noted true multidisciplinary coordination was weak:

**Supriya [WIL4D]:** “... and I think there’s a big fundamental issue going on at the ICO [Integrated Care Organisation] at the moment, the hospitals see themselves as an acute trust still, not as part of an ICO. And the community services again feel frustrated because they feel like the hospital services have taken over the whole agenda and community services are just side-lined and expected to just deliver and it’s not important enough. But actually, the shift that needs to happen, that the commissioners are really pushing for, is more of a shift to make the community providers a stronger partner in all of this, because that’s where we need the services. And for the acute trust to acknowledge that and work with the community providers to provide a more streamlined pathway where patients go to one place for everything almost. You know, in the ideal world. And it’s not just diabetes this is happening I’m seeing it in other areas that we’re working on as well. And I think they’re starting to realise. I don’t think the hospital have realised it yet.”

When asked whether she felt confident that she had made an impact during her time as part of the WI, Supriya said:

**Supriya [WIL4D]:** “My motivation comes from knowing that I can impact on patients’ lives, individually and as a population ... Sometimes when a practice nurse will email me and say, ‘You know what, I’ve just had some patients in on Year of Care and they’ve saying how delighted and how...’ I think one called it, ‘bloody marvellous, and why hadn’t we done it years ago.’ Sometimes it when I’ve arranged a really important meeting and somebody, a couple of days later, says, ‘That was a really, really good meeting. It’s about time. It’s fantastic we’re moving forward with this.’ Sometimes it’s when you finally get a breakthrough, and we’ve got a clinic starting next week. All those little things give me the motivation to just keep on going until the next one, the next high ... And just being that person in the middle to sort of join these people up to start to influence the whole picture. That’s what gives me the motivation. “

### 7.3 Patient & Public Involvement in the WI

Patient & public involvement (PPI) was originally a core component of the boundary spanning intervention under study. Indeed, the WI was launched with a stakeholder event to co-produce the topic areas and priorities within each topic. However, as I have described, the WI fragmented halfway through and - although its methods were



adopted in various ways by other local initiatives - I subsequently observed how the patient groups that had initially been part of the original three topic groups drifted away. Capturing and explaining what happened to the original aspirations relating to PPI has nonetheless been a focus of my fieldwork.

I had extensive research interactions with various local PPI groups that were involved with the boundary spanning intervention to varying extents. I conducted informal and formal interviews with members of many groups that represent patients in the local area, including Coxford LINK, Westpark domestic violence community group, Westpark child & family health services organisation, and individual patient representatives from local services and GP surgeries (see Appendix I for formal interviewees). Certain individuals from these and other patient groups were invited to specific stakeholder meetings - a component of the intervention under study - and my informal conversations with them were captured in my field-notes. Additionally, questions in the semi-structured interviews with community-based staff included asking the respondents to describe: any impact of the intervention on the quality of patient care; efforts to measure outcomes related to patient care; and any increase in staff understanding of the patient perspective. In combination, these data sources allowed me to approach the impact of the intervention on patient experience from multiple perspectives (as in a 360-degree view).

Despite the lack of extensive patient interview and focus group interactions, my qualitative data does include positive examples of PPI in the intervention. In addition, although some patients had declined to be interviewed for this study, patient representatives have been central to the work of one of the topic groups - the anxiety & depression in BME group - and patient views have been incorporated in all of their outreach efforts and other initiatives. Patient voices were identified in the focus groups as described above in Chapter 6.

Participants in both patient focus groups did not identify aspects of patient care newly placed because of the Westpark Initiative. New programmes were not designed by the Initiative as easily recognised interventions; correspondingly, focus groups were not a method through which I could evaluate direct impact of the WI interventions. However, participants were able to describe aspects of coordinated and timely service, which they experienced as seamless care. In both focus groups examples of quick response time through centralised phone lines were described as important, as were examples of having access to a variety of services when necessary. Participants did not ascribe more value to certain disciplines or professional roles, such as preferring nurses to doctors or visa-versa. Participants did want more frequent access to knowledgeable practitioners who coordinated their overall plan of care over time, had access to their test results, and individualised changes as needed. Where services were located was less important than oversight of patient care over time.

#### **7.4 Leader Perceptions of the Impact of the WI**

Given the adaptable nature of the WI, as the founder Chris formulated his own view of the successes of the Initiative in on-going and iterative ways. The expanding networks associated with the WI were seen by Chris as evidence of how professionals changed their behaviours because of the new connections being built:

**Chris [WIL2B] - WI Founder:** “So the very fact that [the diabetic specialist nurse] was there speaking with such seeming confidence and smiling a lot was a result of, I think, the work done in Westpark Initiative coupled with various prompting including my work of the last week.”

Although Chris pointed to improvements in gathering patient outcomes data – *“I think we're in an easier place now to produce quantitative data about that than we were a year ago or even six months ago”* - these have been more difficult for me to identify. For Chris, the focus was clearly on relationship-building rather than any formal evaluation of impact on clinical or quality indicators. When the diabetic specialist agreed to share more data after the community based diabetes clinic finally opened in the spring of 2012, Chris pointed to these changes as strong evidence:

**Chris [WIL2B] - WI Founder:** “So I'm using that as another example of how there's a legacy of people, a network of people who have been affected by it and kind of assume it is a given static long-term entity.”

When asked to describe the successes, Chris points to changes in the levels of engagement of GPs in Westpark:

**Chris [WIL2B] - WI Founder:** “... look at the numbers of Westpark people who are pitching up to meetings and with a smile on their face. They used to huddle in the corners looking very defensive, and they're there talking and smiling. We've got all practices still engaged ... I'm focused on what I think as the more, bigger, things which is the change in the hearts and minds and getting people on the front foot and feeling motivated and part of changing things. That has dramatically changed.”

Certainly, many participants noted the palpable enthusiasm at meetings; for example, as Phillipa, the Director of Quality & Clinical Leadership described, *‘the energy and commitment that was clearly visible’* at the 2011 retreat.

As a commissioner of dementia services in 2009, John was intrigued as to how the WI could be used to improve links between primary and secondary care. By mid-2011, John was able to describe how he felt aspects of the model could be implemented in many areas:

**John [WIA22V] - Commissioning Manager:** “I mean, I wouldn't adopt it as the main improvement approach. But what I would do, and what I have done, is I've taken what I thought was the most valuable stuff out of it. Certainly the idea of recurrent open-ended type workshops where you don't necessarily go in with a preset agenda, but you do hope that certain outcomes will be achieved by the end of it, and you rely on the natural flow and the natural dynamics within that meeting to lead you to where the general group perceives to be the main issue, is certainly valuable. But there are caveats, as in any approach. And I think the value it gives to a manager or a commissioner is how you know the times and the extent to which you should use this tool.”

He further describes that although there is no distinct - or preferred - quality improvement strategy in Coxford, and that although neither dementia pathways nor clinical expectations had recently changed, he believes that the patients' journey experience theoretically may have improved 'because things move slightly quicker' due to better communication between providers (although no monitoring of this is done on a regular basis). With all the necessary tests for dementia that need to be coordinated,

the care can improve through the personal interactions provided by the WI: *‘So you manage the expectation. You don’t change any of the service, but people know what to expect, and that’s different. It makes a world of difference.’*

Despite these concerns about measuring impact, another leader, Phillipa reflected that aspects of - what she terms - ‘Chris’s whole systems model’ could be usefully combined with traditional aspects of management:

**Phillipa [WIA23W] - Director of Quality & Clinical Leadership:** “So we’ve constantly tried to bring those two things together ... And I think that’s the bit of this methodology, by being so pure in its ... at the pure end of how you take the research around whole system thinking, and not perhaps thinking a little bit more about how you contextualise this little bit to the systems that you’ve got, and how you also pay some regard to the other things that are going on so that you can better make it an integral part of everything, rather than this thing that’s going on here, or the WI.”

So when asked if it the model is repeatable, Phillipa described:

**Phillipa [WIA23W] - Director of Quality & Clinical Leadership:** “One of the things I’m really pleased at a strategic level is that we really are trying to hang on to those sort of joint relationships at the top. So what we haven’t yet done, and we’re trying really hard not to do in a sense, is to retreat back into our specific agency corners and attempt to cross shift between each other. So last week, as the executives, we all sat around from each of the agencies and had a very honest conversation about what was going on for us financially, what were we cutting, what impact might that have on somebody else, how do we try and do that. We even had a conversation about trying to create an integrated borough recovery plan and share that across each other. So we need these sorts of approaches even more. The question is: are there different ways of doing them?”

Overall, as far as team leaders were concerned, the Westpark Initiative way of working affected the lives of staff members who were involved, helped to introduce stronger relationships, and introduced an additional form of local quality improvement work. However, from the view of key primary care leaders measurable outcomes were not readily available.

## 7.5 Boundary Spanning Preconditions, Enablers and Barriers

Interview transcripts were coded using Nvivo9 software to identify enablers and barriers to boundary spanning efforts. Codes were historical, team related, theme-

related as generated from the literature synthesis, and any related to boundary crossing as surfaced in vivo, during coding (see final codebook in Appendix P). Codes were then applied to field notes. From the literature synthesis (see Chapter 2) four broad key themes were identified which had to do with the wide range of interpersonal and communication skills needed for negotiating formal and informal boundary spanning roles, particularly when responding to social and political influences on knowledge exchange processes. Through my analysis of the coded qualitative data, I further delineated the processes involved in boundary spanning. Preconditions for successful boundary spanning, barriers to boundary spanning and methods for overcoming barriers were identified in the emerging boundary spanning themes through the coded data, as summarised below:

#### **Preconditions for Successful Boundary Spanning:**

- Freedom of Professional Movement – see patient where/as I need to, for differing patient needs. (**Adapting**)
- Seamless Flow of Information – technology facilitates connections. Seeking new outside ideas. (**Diffusing**)
- Continuity - methods for access & communication make sense and used well. (**Responding / Negotiating**)
- Supervisor supports professional independence, provides Vision, encourages. (**Cultivating**)
- Expert Experience & Competency Builds Trust& Legitimacy. Confidence with other professionals. (**Interpreting**)

#### **Barriers to Boundary Spanning:**

- Administrative & Policy Expectations – Measuring efforts doesn't really represent what we do. (**Freeze**)
- Supervisor/ Commissioning don't support or see benefit of joined up working (can't cost). Not my job. (**Deny**)
- Perceived Inequity seems to cause a shut-down of high performing efforts. (**Retreat**)
- Uncertain expectations cause anxiety. Perceived Expertise / Power Differentials exacerbate tensions. (**Defend**)

#### **Overcoming Barriers– Experience and Acting in the Space In Between – Bridging to Make Improvements:**

- Persistence. Carry On. Just keep working. Coping, unacknowledged. {>Burnout?} (**Accommodate/Compromise**)
- Do the Right Thing. Concern for patient motivates action as needed. (**Push/Assert/Force/Challenge**)
- Act as needed in current context – no matter what job description is. {>Unpopular?} (**Troubleshoot**)
- Find Creative Solutions. Back Door Work Around. {>Risk-Taking?} (**Innovate**)
- Seek Education of Self & others. Reflective Practice. Teaching & learning. Develop as Professional. (**Transform**)

### 7.5.1 Enablers and Barriers

Within the above themes, at the contextual level of conditions for successful boundary spanning, the ability for people and information to have professional freedom to respond seems to be linked to increasing seamlessness at the professional and organisational levels. Building relationships – including having confidence in others was linked to being able to trust their expert knowledge. The theme that new ideas, or innovation, might exacerbate perceived inequities was also an interesting theme, particularly at the cross-sectoral level. One manager described how she actively discouraged her ‘best’ employee from ‘going above and beyond’ for patient care because it would not be sustainable. In overcoming boundaries, there were a number of examples of how professional concern for a patient needed to override managerial expectations. At times, this form of goodwill was motivating for quality improvement and individual job satisfaction, but had the sting of association with an individual being somehow difficult to manage. In the next chapter these boundary spanning themes will be further explored through the SECI conceptual framework for knowledge exchange.

### 7.5.2 Key success factors

From the coded interviews, key stakeholders – staff and patients - identified four ‘key success factors’ relating to the WI; all of these were highlighted in terms of their absence from the Initiative and offered as explanations for why it had not - in the views

of senior interviewees - achieved as much as they had hoped. Four key factors can be identified, all which require focus and attention:

**Key Success Factors:**

- Senior leadership support
- Measuring impact
- Structure of initiative or programme of change
- Patient and public involvement

The rhetorical tone at the end of the previous quotation is indicative of the first 'key success factor' of the WI identified by key local stakeholders: *senior leadership support*. It was clear from my fieldwork that support for the WI was not forthcoming from all senior leaders. John felt that this was due to the approach and its appeal being problematic:

**John [WIA22V] - Commissioning Manager:** "I do think it has suffered from lack of senior leadership support. And I've seen this on more occasions than one. And what I did notice, it's all the pragmatic learners who didn't see much value in it, because they can't personally relate to that type of working, who thought it's too fluffy, and it won't lead to anything. And unfortunately, most of the people in this world are pragmatic learners."

A second 'key success factor' - *measuring impact* - was clearly identified by Phillipa who was frustrated at the lack of progress in identifying 'hard measurables' for the WI:

**Phillipa [WIA23W] - Director of Quality & Clinical Leadership:** "The difficulties of data collection gathering and setting up data analysis systems ... we seem to have been having some of those conversations for a very, very, very long time."

As she explains, the methodology of the WI meant that it was difficult to define and monitor relevant metrics:

**Phillipa WIA23W - Director of Quality & Clinical Leadership:** "So I think the biggest challenge now is moving the overall equation towards, 'Is it sufficiently effective, and is it sufficiently output-focused, to warrant us continuing to do it?' We do know it delivers, but what I was saying earlier about the pace of change and this balance between consolidation and change may not necessarily work in its favour."

The scalability and sustainability of the WI was openly debated among senior management. Although John described the *potential* for increased sustainability of the

changes implemented by the WI model, he also mentioned the lack of extended reach to GPs that would limit that potential to increase the scale of the approach.

**John [WIA22V] - Commissioning Manager:** "... aligning the work of the Trust with GPs goes beyond just the 5-6 GPs who are involved through the different stages of [the WI]... but not a lot beyond. And I would suggest that this is partly due to the leadership and the professional opinion that those GPs can leverage within their locality. Which in some cases isn't very much, or some of them may not necessarily be very highly regarded."

A third 'key success factor' relates to the perceived lack of *structure* in the WI. This was a frequent criticism by senior managers and one that became more acute as almost all jobs and titles in the PCT changed in early 2011 (anticipating restructuring changes related to national reforms and necessary cost reductions in the NHS).

A fourth 'key success factor' was the importance of patient and public involvement:

**Phillipa [WIA23W] - Director of Quality & Clinical Leadership:** I think in some of these whole system methodologies can, particularly if you bring patients and carers into the centre, can bring the best way for communicating confidence in the system ... It's when they aren't confident about that because the system is fragmented, or they think they'll have some horrific nightmare to get re-referred in, that they won't get out in the first place.

As primary care leaders identify, patient and public involvement is crucial, however the level of community involvement observed at various events was less than expected.

**Anupam [WIP20T] - Community Leader:** "I think from my perspective, obviously we have to attend meetings regularly, you're covering all sorts of issues, but if it becomes apparent that the meeting isn't really something that fits in with your core objectives, like anybody else, you just say no. That's what really it came down to. I think I remember Chris, I don't know if any of his colleagues did, asked for us to remain involved and lend a community presence to the whole thing but I did have the impression that this was something more for the professionals than it was for people from the community. That's why after a while I think my interest waned."

Although these four success factors were acknowledged by key leaders, the actual mix of such factors waxed and waned through of the length of the Westpark Initiative. In Chapter 8 the enablers and barriers for boundary spanning and integration efforts in health care will be explored at a deeper level through the conceptual lens of knowledge exchange.



## **CHAPTER 8 Case Studies through the Lens of SECI and BA**

### **8.1 Introduction**

As a multi-faceted, longitudinal, nested case study, this study examined the efforts of professionals working to improve services around four topic areas in a local area of London covered by one primary care trust, as described above. Due to the nature of the locally developed Westpark Initiative, which itself was organically derived and iteratively delivered by a shifting collection of professionals across primary, secondary and tertiary care, finding a rigorous method of analysis to view the micro level data was a primary challenge. I endeavoured to find a framework, which would allow me to analyse, with deep dives, to determine exactly where boundary spanning interventions were able to make improvements to positively impact patient care in this complex context, as previously outlined. My extensive literature review of boundary spanning theory and a meta-analysis of the empirical boundary spanning research in the healthcare setting did not produce a sufficiently robust tool for analysis of such a complex set of interventions. I have found that the SECI model of organisational knowledge creation serves as a more useful, and as I will argue, a more deeply applicable lens for understanding the activity within the many interfaces between organisational, sectoral, and professional boundaries.

In this chapter each case is presented through case descriptions in Sections 8.2 to 8.5 with their boundary spanning efforts to integrate as viewed through the lens of the SECI cycle. In Section 8.6 a cross-case analysis is presented, including barriers and enablers to boundary spanning and the progress of each team through the SECI cycle.

### **8.2 Anxiety and Depression in BME Populations Case**

#### **8.2.1 S: Socialisation**

During the Socialisation stage, *ba* is originated by empathising with experiential knowledge assets. As an example, an administrator working on diversity and public health issues verbalised the need for face-to-face interactions in Coxford with

significant local challenges, and describes with enthusiasm what needed to happen, even without having witnessed any actual changes.

**Hugh [SIP150] - Head of Partnerships and Diversity** "... I have heard examples of GPs saying quite explicitly, 'We're discriminated against because we're Indian,' or there's caste discrimination, I've heard that often. You know, the wrong caste, the wrong creed, the wrong colour, either in terms of people at the PCT or in terms of other GPs. So there are groupings that sometimes we don't know about, or that we only get glimpses of, and talk of discrimination. And it's very difficult to see what reality there is behind that and how much is sour grapes and personalities, and how much there are genuine issues, and how much there might be hidden discrimination with that. It's very, very difficult to tell. But in terms of the talk that gets in the way of things getting better, those are big issues....I haven't seen it broken through, no. But I think if anything is going to break through, that sort of thing is going to help, because it's about bringing people together. So for example, what you see in dementia with the debate between GPs and the Mental Health Trust, it's instead of letting people stay in their silos and see the world in their way, it's making them get out and see the world another way. And that can only be helpful."

**Noted features of this Socialisation stage:**

- ✓ Enthusiasm exists for the Westpark initiative to address divisive issues which are not clinical, but which do impact local services
- ✓ Professional empathising and shared experience recognised as a way to break through personal taboos and professional silos
- ✓ Belief in the importance of interdisciplinary exchange is not matched by evidence of change

**8.2.2 E: Externalisation**

In the externalisation stage, there are moves through the spiral through dialogue. In this example, a community health worker was not assigned to be involved with the Initiative but was casually invited to attend. After interdisciplinary socialisation, this individual began to articulate mental health areas of outreach through cross-team dialogues at Westpark Initiative stakeholder meetings, and soon saw opportunity to develop conceptual knowledge assets in the local area. The community worker takes the initiative to develop and deliver four information sessions reaching around 30 staff members of community level programmes.

**Samantha [WIP11K] - Community Worker** “I was relatively new to the job, and I was quite keen to just have something to show that I was doing, because I felt like nobody had really given me any direction. So it was nice to be able to say that this is what I was doing regularly and I was going to these meetings specifically for that to improve it. But I also found that I ended up doing lots of other things with the other kind of groups that were involved, particularly children and families, because we had a lot of issues with mental health and people with BME backgrounds, but they often hadn’t made any connections with other people or anything like that. So basically going and making connections with the family groups that are out there in Coxford and talking to them about mental health services and things like that was actually really productive, because they hadn’t really had any information about what is mental health, ‘How do you identify it?’ the parents were saying and things like that. So I ended up developing this mental health, I don’t know, information kind of session for volunteers or lots of the community groups that were in Coxford, so that they would have an understanding of what mental health is and how it’s identified and black and minority ethnic groups and things like that, and how to talk about it yourself, because everybody’s got some kind of history themselves or their family and things like that...”

The community worker goes on to describe how she easily saw that health issues were not just a part of the mental health and well-being realm, but that the cross-team links were becoming clearer to her over time.

**Samantha [WIP11K] - Community Worker** “...So to be able to then touch base with other things, and then that leads to dementia, because people who are under a lot of stress have mental health issues because they’re caring for people with dementia or diabetes or whatever...So it was kind of just recognising what mental health looks like in yourself and in other people. It was really nice, and I really enjoyed doing it, and I wish I could still do it to be honest. It was nice having that awareness with people....So I just put together something, and then from there I went and initiated that with lots of the other family groups that I knew from the Westpark Initiative as well....”

#### **Noted features of this Externalisation stage:**

- ✓ Loose supervision and flexible professional socialisation increases individual awareness
- ✓ Experience of enthusiasm and connectivity through the Westpark initiative prompts problem solving and induces personal growth.
- ✓ Dialoguing *ba* develops without a clear pathway but motivates the individual to externalise activity beyond professional role.
- ✓ Professional and personal motivation is positive with exchange of dialogue.
- ✓ Experimentation is made possible through dialogue. An adaptive innovation, tailored to local needs, is individually initiated without top-down guidance.

- ✓ Effort is not sustained when the professional changes jobs and/or reorganisation is experienced

### 8.2.3 C: Combination

**Pam [WIP10J] – CBT Therapist:** I think the direct impact is knowing that I'm here, that's one of the things the GPs now know. The disadvantage of that is that they quite often interrupt my sessions because they know, 'Pam is downstairs, I'll just call her and ask her.' In one session I had Dr XX call me and say, 'Oh, can you come up here I've got a client who's at high risk, I don't know what to do.' And I was with a client and I said, 'I'm really sorry I can't, but can you wait 10/15 minutes.' So it has its own disadvantages, but I think them knowing that there's somebody here who they can count on for support, who will tell them the right information is really great. The other impact is then they know what we're doing, they know all the different anxieties they can refer for. Before we weren't getting very much referrals for things like OCD [Obsessive-Compulsive Disorder], for instance, which is very much a lack of understanding amongst the BME communities, they don't recognise what OCD is. So if they go and see their GPs, if they can pick that up and they can refer, we can do some good work with them and they don't have to suffer with it. So I think increased awareness is one of the key issues with GPs".

In the Combination stage, there is a move of explicit knowledge that connects with a systemizing ba. As an example, an office worker in healthcare was inspired to gain additional training as a CBT therapist when national policy support for IAPT services offered funds for training. After graduate level training the therapist is located to a local GP surgery, to serve the population of Westpark which has always been home. As a link worker the CBT therapist makes persistent efforts to get past the practice manager to meet directly with the GPs, and initiated a meeting with all GPs in the large surgery and three members of the local mental health team to explain the available mental health services. The evidence of impact of this boundary spanning meeting is described by the therapist as seeing increased awareness by the GPs, with increased multidisciplinary utilization, and improved appropriateness of referrals, a year after the meeting. Helping clinicians in another discipline becomes an important effort for increasing access to services for a wider group of patients.

Fine-tuning of the referral process, and timing of communications continues, however it is clear that improved local adaptation is evident in qualitative exchanges, not just in the quantitative values of referral rates.

**Pam [WIP10J]** *“They now know little by little how to differentiate between primary care and secondary care, although I think there’s a lot of work to be done in that area. And this idea about we should hold clients if they come through to us, I think there’s a lot of work that needs to be done there. So that actually once we’ve bounced clients back it’s because there’s a reason and because we’ve done our bit of work as primary care workers, so, therefore, if there are risk issues they then need to be referred on elsewhere. But to make the systems easier what we’ve now done is within the service if a client presents to us with any kind of... and quite often they would have many other problems, but if we detect through our assessment that this client needs to be referred for secondary care services or long term psychotherapy we take it on ourselves to make that referral and so it’s not, therefore, bounced back to the GP. Although I do query whether that’s being done by the whole team, but that’s the agreement and that’s what should happen”*

In further exchanges, the same therapist talks about the positive impact of “promotional” work by the mental health team to increase awareness about the counselling services: radio shows in a local dialect to reach potential patients, disseminating pamphlets and posters, meetings with GPs at their surgeries, and meeting with people at the Gurdwaras, the temples, the colleges, the day centres, and the town hall. In an intentional reflective practice this team met regularly to ask: *“Were we getting into every nook and cranny that we could?....Trying to break down the stigma so that more people are coming forward and saying, ‘Yes, I have a problem and I can get help for it.”* In this manner outreach becomes more than social exchange, and more than articulating explicit knowledge – literal efforts to document and package explicit knowledge is systematically explored.

#### **Noted features of this Combination stage:**

- ✓ Explicit knowledge assets in the form of written and verbal referrals are in place, and efforts to improve systems of patient information exchange are in process
- ✓ Barriers to professional combination and interdisciplinary working are recognised and meetings are arranged to overcome system problems by increasing awareness of services.
- ✓ Appropriate referrals, and patient connections with right care at the right time, improved with increased awareness of multidisciplinary services.
- ✓ Identification of problems in systemizing *ba* and routinizing specific levels of care transition are noticed. Feedback loops (effective information exchange as well as ineffective referral bounce back) are noted. Tension and frustration are also noted as efforts to improve processes remain explicit and individualistic.

- ✓ Westpark Initiative affiliation supported the mental health team intervention of initiating meeting with local GPs and surgery staff to increase understanding of available mental health services.
- ✓ A creative variety of promotional activity impacts professional and patient utilization of services with evidence shown in increased referral rates, more appropriate referrals, and perceived increases in awareness of the service amongst the BME population.

#### 8.2.4 I: Internalisation

In the Internalisation stage explicit knowledge is now embedded in routine practice, which exercises and embodies *ba*. In this example, the leaders of two services, one hospital based, and the other in community based mental health services and counselling, developed an exchange programme for staff to learn about each service. As a routine process, a member of the IAPT team spends half a day a week with a crisis team based at the hospital to observe a few caseload sessions. This process started in 2009 and continued through 2011, but was not initiated by the Westpark Initiative interventions. As the manager of the acute response team, based at the hospital describes:

**Anna [WIP30D] Mental Health Home Treatment Team** - I think it's been a massive importance because I think those members of staff when they go back are real ambassadors for that type of work and I think they must go back very positive or they do go back very positive, that's the feedback I get, and they're all sort of... they have to put names in a hat, who's coming next because...they all want to come, because they all find it really valuable. I mean the crisis team find it valuable too and they're always a pleasure to work with because they're keen, you know so it's good for the patients but it's also good with that sort of integration of working together. And I think that's helped with some of the changes in patients that are perhaps accepted into their services and it's made it smoother, you know, much more seamless. They are able to prioritise the crisis team patients often so that there's a minimal gap between being discharged from a crisis team and taken up by their services over in the wellbeing....I think it's helped because I think it stopped the referrals of people that really wouldn't fit their criteria...So I think it's built up, perhaps their knowledge a bit more as well of how they can access the services. And it's just the interface isn't it, of improving interface as well.

#### Noted features of this Internalisation Stage

- ✓ Leaders who have experienced different services recognise the difficulty of managing patients who cross multiple interfaces – and intentionally look to address the problem through cross-training their staff. Explicit knowledge is routinised to intentionally impact organisational culture(s).

- ✓ Knowledge assets are recognised and packaged in a systematic way – staff gain experience of other services and exchange explicit knowledge of the intricate workings of different services, which then is tacitly exercised as *ba* in their on-going work routines.
- ✓ No stated connection to the Westpark Initiative but overlap of staff and shared issues exist. No top down or national policy guidelines have been invoked to prompt this activity.
- ✓ Scheduled professional exchanges are initiated and perpetuated by motivated staff
- ✓ Organisational culture changes in both sectors to induce and benefit from boundary spanning in active processes, and explicit and tacit knowledge exchanges.
- ✓ Middle-up-down management is embodied effectively in this stage.

### **8.2.5 Overall Movement through SECI for Anxiety & Depression Case**

In working through the qualitative descriptions of mental health outreach efforts, it appears that the members of this team came to the early meetings of the Westpark Initiative in 2009 with prior skills in counselling individuals, socializing in multidisciplinary professional circles, and in recognition of individual and organisational level patterns of behaviour change. Socialisation pre-existed, and was enhanced by, the Westpark Initiative stakeholder meetings. Including GPs and other stakeholders in meetings was a modelled technique which was then used by this team to induce similar exposure to shared tacit and explicit knowledge about types of patient care that are offered in different settings. The Westpark Initiative directly provided opportunities to originate and dialogue *Ba*, by providing opportunities and demonstrating efforts to socialise and externalise. However, the Westpark Initiative did not actively teach or prompt efforts to systemise or exercise *ba*, which was instead catalysed through intrapraneurs with the capacity, flexibility, and experience to consider new and different ways to integrate services. For the mental health team, the opportunity to place professionals at strategic junctions of knowledge flows (both horizontally and vertically), has demonstrated qualitative improvements in information sharing and improvement in appropriate referrals to different services along the acute to community based spectrum of care.

### 8.3 Dementia Case

#### 8.3.1 S: Socialisation

In the Socialisation stage, *ba* is originated by efforts that empathise with experiential knowledge assets. A community pharmacist attended a local dementia meeting hoping to hear more about how to signpost the exhausted carers of elderly parents with signs of dementia. Frustrated by identifying patients at home with poorly managed medications, concerns about how to initiate access for families into primary care provide the motivation to attend a nearby educational event.

**Sanjay [WIP34H] – Community Pharmacist:** “I was hoping that they would keep... you know because I left my email and everything there. I was hoping I would get feedback. I wanted it in a bullet form, patient walks in or carer walks in, they have this, this... there was nothing. I really thought it was a waste of money.”

The pharmacist's concerns were not addressed by an educational session sponsored by the dementia team. Unfortunately at this meeting apparent explicit knowledge was not available, there were no tools for signposting, nor were the pharmacist's suggestions noticed by others at the meeting. The pharmacist recalls the meeting by describing continued frustration for patients with dementia.

**Sanjay [WIP34H]** “There are no connections. Unfortunately the patient or the carer to the pharmacy, pharmacy to the doctor, the doctor to the social services, it's disjointed.... Phone numbers, I tell them to talk to the GP, make an appointment, ask the GP to forward you to certain care workers. Most of the time, you know when they find out? When the patient has gone AWOL or they've had a fall or their blood... they've had to go into Accident and Emergency for reasons and then suddenly the whole system opens up. The social care, everything opens up but it does not open up at Primary Care level”.

The pharmacist was able to verbalise some ways to decrease inappropriate use of acute services, and to improve signposting in primary care including the walk-in impromptu opportunities to advise clients at pharmacies. These suggestions were not heard beyond the table where he sat at the meeting.



**Sanjay [WIP34H]** “Well, I think it would be good to have phone numbers, emails, well websites I can look them up but still... and direct these people where to look and when they send an email, there is a response. There is a chain of events. There are online questions and answers, which give you numbers, that tells you where your parents are at this level of dementia or requirement of special needs. Nothing. I’m not aware”

**Noted features of this Socialisation stage:**

- ✓ Interdisciplinary meetings offer the opportunity for sharing explicit knowledge. Agendas with clinical content may not be useful without dialoguing efforts for sharing methods for systemised connections across sectoral boundaries.
- ✓ Originating *ba* can be accomplished through the generation of enthusiasm and professional curiosity at stakeholder meetings – but the opportunity is brief and motivation to carry efforts forward can be missed.

**8.3.2 E: Externalisation**

A nurse in community based dementia care describes how his ability to speak with his supervising physician has improved; his confidence has improved, perpetuated by feedback and open discussion.

**Ganesa [WIL3C]** “The person I was working with, he’s not... he went on holidays for three or four weeks. In his absence, I had made a lot of decisions without his help. Even though I have discussed these decisions with the doctor afterwards, but that four weeks off, his absence, gave me the opportunity to take much more positively doing these clinical areas... He was pleased with that, because this is the first time it happened. It had never happened before. Somebody was always with us, so it was the only time because he went away and when he came back I got this constructive feedback from him... My relationship was always sort of good in the sense that I never had any problems with anybody, but of course, it enhanced the way we worked and he gave me much more positively... I can think more positively by myself now, and the relationship with regards to that is definitely improved. We are much more open in discussing or giving each other feedback. It’s just like not getting the feedback from him; I can give feedback to him as well.”

When asked how patients notice the impact of changes in a nurse’s work, a nurse relates a newfound confidence in using the patient’s language to communicate about care. In the dialogue demonstrated in this remembered exchange, the reluctant patient is finally transitioned, appropriately, from an acute team to a community-based team for older patients.

**Ganesa [WIL3C]** “One of my patients was being transferred from the acute side, from the under 65, the other team, and that client only speak Punjabi language. There was no other language he was speaking, so I had to... so that case was given to me. I took over the case because I knew that he was not going to go anywhere to our team, so he won't be feeling that comfortable with any member of the staff. So I took over the case and with the joint working with the adult CPN and myself, we worked together to make him feel so comfortable in the environment, and he was so reluctant to come to our services because of this language barrier, because he couldn't speak anything, and he was so... in the sense that he didn't want to move from that area. He said, 'I'm not going to transfer my case to the older people service because of this problem.' I talked to him and made sure that I reassured him, I made sure that he understood what I said, and I listened to him very actively with all of my communication skills, and he was so... he doesn't want to go to the other side now. He felt so relaxed with me, he said, 'I want to come to your team now,' which I thought that was an achievement.”

**Noted features of this Externalisation stage:**

- ✓ Dialoguing *ba* moves tacit knowledge to explicit information with greater effectiveness for both the practitioner and the patient's care
- ✓ Responsive, adaptable transitions can be made through collaborative sharing of expectations – knowing both what the service requires and hearing the patient's concerns
- ✓ Feedback given and received between the nurse and doctor are an important aspect of increasing practitioner confidence and accountability.

**8.3.3 C: Combination**

For the dementia team, producing materials in different languages became an important objective. Translating clinical tools for memory assessment, and disseminating dementia information in local dialects was an important goal, but without a systemised process in place.

**Ganesa [WIL3C]** “For the patient? I think, again, the patient who comes... the difference is going to be... I would say that because the leaflets we have produced and the other tools I have produced with regards to that, our assessment process, I think they are more friendly used. The information we are giving on the GP surgeries, they would not be able to get that if that had not happened. Now, all the six GP surgeries in my cluster, they have got the information on the dementia in different languages. The people, they can choose and pick whatever they want. The carers, or the patient, or anybody, they can look into those leaflets and they can go back to GP then refer to us. But before, it was not. I haven’t seen any sort of leaflets there saying that if you’ve got... worried about your memory, what to do. I think that has been beneficial to the patients now.”

When the team leader for this team was made redundant, this team lost momentum and the PCT soon found other topics on which to focus.

#### **Noted features of this Combination stage:**

- ✓ Explicit knowledge assets are put in place, for patients and practitioners
- ✓ Wide dissemination of materials can lose traction without funding and systems in place
- ✓ Gathering evidence of impact for local improvement needs to be paired with the intervention, otherwise momentum may be lost.

#### **8.3.4 I: Internalisation**

In the internalisation stage, *ba* is exercised to identify problems in explicit services. An experienced nurse and administrator explains being aware of referral problems. Entrenched routine is noted to be ineffective and an audit demonstrates where (but not why) there are gaps in services

**Sandra [WIL9I]** “Around referrals and getting referrals at an early rate. As part of the older person’s mental health strategy that was developed, and the action plan that fell out of that, we did an audit. We actually looked at our GP referral rate in dementia and very significantly there was a number of surgeries in Westpark that hadn’t referred in 18 months and we knew that this wasn’t right, the hypothesis was that we should have had a lot more referrals. When you looked at the population we had, the epidemiology formulas, we knew that there was an awful lot of patients that were not being referred to us, so anything to sort of try and elicit more referrals in.”

#### **Noted features of this Internalisation stage:**

- ✓ Routine efforts, such as audits, to examine services can identify systemic problems, but may not identify why gaps in services exist, nor suggest solutions
- ✓ Middle up down management can be used identify local service gaps, but socialisation may be needed to explore new ways to address reorganisation.

### 8.3.5 Overall movement through SECI for the Dementia Case

This team struggled to find coherence as a team. Without clear membership beyond the two leaders, one of whom retired from the area, and the other who was shy to lead, mean that the objectives for the team were lost as soon as there was no local champion. The Westpark Initiative focused on socialisation through stakeholder meetings, but was unable to engage GPs in assigned groups or at open meetings. On-going attempts to structure outreach and to prompt lasting dissemination soon lacked traction, and the agenda of educational outreach was not able to promote available services effectively.

## 8.4 Diabetes Case

### 8.4.1 S: Socialisation

During the Socialisation stage *ba* is originated by empathizing with experiential knowledge assets. A commissioner (assigned prior to GP commissioning, and a master's prepared scientist, but not a clinician or GP) is asked to work with the Westpark Initiative to see how to improve diabetes care. As stakeholder meetings happen a greater perspective of primary care services is noted by the commissioner – and barriers and facilitators are recognised.

**Supriya [WIL4D]** “Well, when I... through the Westpark Initiative, we were working with six practices. And what had happened, inadvertently, because I was a PBC manager as well, I happened to be working with just six GPs. And nobody else was invited to that GP commissioning meeting, it was just the GPs. And I was going round and round, and I was trying to deliver things and plan things, and plan service provision over the Westpark Initiative with just the GPs. And every time I got close to getting anywhere near starting to implement something, I found that there was a drawback to it. For example, just inviting patients to a workshop, the GPs all turned round to me and said, ‘Oh, yes, we can do this, but we don’t have the time. You’ll have to ask our practice managers, you’ll have to ask our practice nurses to do it.’ So they started to tell me – okay, that was the patient workshop. And then it was, ‘Oh, we want to arrange a clinic in each practice.’ ‘Oh, yeah, oh, just talk to our practice manager.’ When I got to the practice managers, however, and we started meeting the group of practice managers, the practice managers started to say, ‘Oh, but hold on, you really need the views of our receptionists, because they do a lot of this, it’s not us.’ ‘Okay.’ So then I went to the receptionists. The receptionists said, ‘Oh, yeah, we do a healthcare assistants role as well, you need to know what we do, because they’re the ones that are going to be running that clinic with you, we’re not going to be doing it. We’ll call the patients in.’ So eventually everybody in the group, everybody that worked in the practice, got involved at some level. So the practice nurses, healthcare assistants, the practice managers, the GPs themselves, everyone. And that’s when I realised that it’s not a GP’s practice, it’s a multidisciplinary group practice.”

#### **Noted features of this Socialisation stage:**

- ✓ Learning what other disciplines do and how staff members in each area contribute to system working is an important part of the socialisation stage, whether accomplished informally or formally through meetings.
- ✓ Originating *ba* can be time-consuming, particularly if addressing different professional groups at different times. The effort to make tacit knowledge explicit can contribute to an experience of either: shifting responsibilities (and non-action), or dialogue (and potential for action).
- ✓ The commissioner or trust administrator in the liaison role may need to serve as a bridge between disciplines, but is at a disadvantaged position of oversight of a multidisciplinary group which does not view itself as an integrated team. Initiating socialisation is the logical step at this stage, but not easy given time and geographical pressures.

#### **8.4.2 E: Externalisation**

Locally, there has been a wish to start a community-based clinic for diabetics to increase access to services. In the five years prior to the WI, occasional conversations had happened, between primary, secondary and tertiary care professionals regarding funding, premises, personnel and a variety of other matters relating to the appropriate

provision of diabetic patient care. Administrators, managers, practice nurses, specialist nurses, GPs and consultants had at some point taken part in the discussions with many roadblocks observed from different vantage points. A community based nurse manager describes one part of the conversation.

**Constance [WIP29C]** “Okay, what we said was that we’ve only got three whole time equivalent nurses to cover a very large population. We needed to do a pilot to demonstrate how it would work. We would like it to have been nurse led. The diabetes nurses said they didn’t feel confident to do a nurse led clinic without consultant backup. The consultant said he didn’t have the confidence in the nurses, that it was nurse led, and so what he wanted to do was a lift and drop. So a hospital clinic lifted and drop it into the community. We said that really wasn’t the plan and that it really wouldn’t work because nothing would change and we needed to see a step change where we were looking at patients that were being treated in the hospital, in the out-patient clinic, that didn’t need to be there and could be seen by the GP or by a community nurse, diabetes specialist nurse, or a practice nurse. So we got the GPs involved, which is really important. Because the Westpark initiative was being involved at the time last year it was felt that everything to do with diabetes seemed to be focused around Westpark. And we wanted to give another opportunity to another area and that’s why [two neighbouring areas] were chosen, because they’ve got GPs in that area with special interest in diabetes and also the GPs were quite keen to see it happening.”

#### **Features of this Externalisation stage:**

- ✓ Dialoguing *ba* is an extension of the tension discovered through socialisation. Explicit knowledge in the form of professional concepts and ‘brand’ equity can be used to hoard, block, or enable the sharing of knowledge.
- ✓ As each ‘side’ articulates their needs, moving knowledge from tacit to explicit, the need for facilitators increases when the challenges are complex, particularly if complicated by arguments over limited resources such as funding.
- ✓ Vertical Integration appears to be particularly challenged at the movement from Externalisation to Combination (from dialoguing to systemizing). Putting a system in place is a commitment that must be explicitly clear to all parties.

This description barely describes the deeply political standoff between the hospital and the primary care trust, and the various professionals in between. After more than a few years of wrangling, a clinic with a less than ideal location, and a less than ideal work plan (according to many), was opened for half a day a week. Patient involvement in the

planning process was particularly sidetracked due to the lengthy negotiations taking place. Clearly, horizontal integration was negatively affected.

#### **8.4.3 C: Combination**

In this example, an experienced diabetic specialist nurse (DSN) talks about her years of experience in different parts of the healthcare system – primary, secondary and tertiary care. Knowing how the system works, and knowing the faces of professionals who trained together means access to services can be solved with a call to known individuals. A central phone and index cards with patients' current information is used to connect patients quickly with a responsive practitioner. The same DSN taught multidisciplinary diabetes courses at the local university, is based at the hospital but moves comfortably between settings.

**Lillian [WIP33G]** “Yeah, it worked. And then also, as I say, the diabetes nurses and this is what we when I first joined the team, we would go out to GP surgeries, so as well as covering hospital and the outpatients, we all covered at that time ... it was something we really enjoyed doing because you had both worlds, you had patients, you were seeing patients regularly who you became engaged with as well, you had practice nurses who you were supporting so there was an education role. You saw patients at different stages of their diabetes as well because you would see them quite newly diagnosed, going through early treatment steps and then also you would see them in the GP surgery and if they had more complex needs, you would see them here as well. So the patients had a real sense of, ‘Oh, I see you at the surgery you come into Dr So-and-So’s surgery.’ ‘Yes, I do.’ And they had a sense of continuity, as I say, sometimes I think that we were the continuity through their journey really.....”

As a clinician, Lillian described how she has the flexibility to move her patients into different kinds of appointments, based on how she thinks she wants to treat them, at the moment. Although there are central phone lines and booking appointment systems, she has the professional competence and confidence in her ability to see patients when and how she would like to, based on her current assessment of the patient's particular needs at the time.

**Lillian [WIP33G]** “Yeah, and the practice nurses, GPs, it’s just sort of a central line that they can ‘phone direct and it’s got an answer machine or we’ve got XX who answers the ‘phone for us at the moment. And they will say, ‘Lillian’s asked me to ring with my bloods,’ because an awful lot of contact is done by the telephone because people will ‘phone, I will see them today and I’ll start them on a treatment or change their treatment or something will come up and I’ll say, ‘Okay, give me a ‘phone on Friday afternoon and then we’ll see where we are and then maybe I need to bring you in somewhere else,’ or if it can wait then I will put them into a recognised appointment slot but, our appointments are six weeks ahead and diabetes can’t wait that long and equally, I think, even in a surgery you try and book into clinics they’re always very fully booked whatever it is, even if it is just to get your blood taken, ‘Oh we can’t take your blood today.’ Again, appointment systems don’t always suit people with diabetes because the problem is actually often quite... if it’s sorted out now it doesn’t become a problem later on. I think that’s the thing.”

**Noted features of this Combination stage:**

- ✓ Explicit knowledge assets are easily packaged and used.
- ✓ *Ba* is actively being systemised
- ✓ Professional satisfaction is high with the ability to apply professional knowledge assets to move patients to the ‘right’ care at the ‘right’ time.
- ✓ System pressures to build more routine and equitable care have created challenges

Due to pressures of healthcare system reorganisation, this programme is being asked to change where and how patients can access the DSN and Specialist Consultants in the community. Although well systemised the current provision of services is not routinised enough to be far reaching into all aspects of the local diabetic population – and pressures to change currently mount. Tension to create more vertical integration are verbalised by many of those involved in providing care to people with diabetes.

**8.4.4 I: Internalisation**

A GP and GP trainer from Coxford is well aware of the connections that have to happen for diabetics and is able to describe long-range planning to up-skilling and positioning a good skill-mix of staff in the surgery, describing efforts with key personnel that have taken two-ten years to put in place, with good success.



**Kamala [WIG6F]** “We have streamlined our practice so that if you are a new diabetic you will see our nurse practitioner and you will have half an hour where somebody who will explain what the disorder is and how it should be managed. We will refer you to the Sure Start Service where you will meet a dietician who will give you advice, give separate appointments for advice as to how to manage your diet and cook and so on. You will be referred to the retinopathy clinic and be given a sort of management plan and be called and recalled. So the service that we’re providing does this, but as I say I can’t talk about what happens in Westpark. And it’s taken some time for us to get this service more streamlined and it’s meant that key personnel in the practice, the nurse practitioner and one of the doctors, has had to go off to the [University] Course to brush up on their diabetic care. And actually, two doctors and the nurse practitioner went off on an initiation course. For example, if we feel that a type 2 diabetic in this practice needs insulin we don’t send them to hospital for it we do it.... Yeah, it’s done onsite. I mean those sorts of outcomes are easily demonstrated on very good figures in terms of diabetic control, and blood pressure control, and referral to retinopathy screening, and so on.”

**Noted features of this Internalisation stage:**

- ✓ Organisational change (at the level of the surgery) has been intentional, strategic, and long term. Embedding routine knowledge assets takes time and planning.
- ✓ Exercising *ba* includes positioning key personnel at strategic junctures in care, and increasing access to programmes of all types: training for staff and screening/counselling/education for patients.
- ✓ For streamlining activity to happen, awareness of local and national resources/explicit knowledge assets must already be in mind. Services do not need to be all co-located but an ability to use know how in daily operations is both explicit and tacit.

**8.4.5 Overall Movement through SECI for the Diabetes Case**

The Westpark Initiative Diabetes team had an advantage on having a focus on inheriting a goal and ultimately managing a disease that is supported by many evidence-based guidelines. Concerns for how to commission and fund services, and reorganisation at the local and national levels, very much complicated efforts to create and follow-through on what might appear to be a single project. In addition, despite having a clearly named leader throughout the Initiative, the complexity of funding arrangements meant that few people who were working on improving diabetes services saw themselves as a member of an actual team. Personal, social, and political divisions stalled this team at the Externalisation (dialoguing *ba*) stage for a very long

time. After many years of facilitated dialogue, a compromised goal was achieved when a community-based clinic for diabetes was opened in Coxford in early 2012.

## 8.5 Child & Family Case

### 8.5.1 S: Socialisation

During the socialisation stage *ba* is originated by empathizing with experiential knowledge assets. In an effort to connect services in the community, including both primary care and social care, stakeholder meetings were held in local area centres and a wide range of patient and public representatives were invited. A community coordinator talked of early excitement – and quick disillusionment with appeared to be a focus on process instead of action.

**Anupam [WIP20T]** “Initially I went in with a very open attitude. I didn’t know what to expect. After a meeting or so I thought maybe this is going to be a practical project in the sense that there may be some attempt to resolve some of the things which patients from meetings we go to have been expressing as their concern. So access being the number one priority, but also the lack of certain services in the area. Why can’t we have blood testing, phlebotomy, why do our children when they’re sick have to be taken to Coxford Hospital? Can’t we have some kind of paediatric facility nearby? Those kinds of things that have come up over the years. There were a number of issues. That’s really what kept me interested at that stage. It was also the reason why I think I lost interest, quite frankly, afterwards because I think I came to feel it was a research project. I’d been maybe a bit naïve, it was a bit too much a focus upon the academic side of things, and research, and research method, and so on. I was probably being a bit too impatient and I wanted the world to change in the space of six months or so. Really that’s how it started for us, and finished for us I think....”

As Anupam continued:

“....Chris asked for us to remain involved and lend a community presence of the whole thing but I did have the impression that this was something more for the professionals than it was for people from the community.”

#### Noted features of this Socialisation stage:

- ✓ Public and patient involvement can be easily invited by local interventions but engaging dialogue requires more than passion. Committed articulation of community (as in brand) equity must be maintained through continuous outreach. Neither scheduled meetings or informal exchange are enough – dialogue must be continued to create traction for local projects to develop.
- ✓ Innovative solutions to healthcare system problems can emerge from the community, but if they are not heard and acted upon then community members will quickly withdraw interest.

This community worker did describe other local projects that had engaged aspects of the diverse community in Westpark. Intrapreneurship had been catalyzed by helping to secure funding for local community projects, such as cooking classes, walking groups and other health promotional activities arranged around local ethnic and religious communities. However, the Westpark Initiative struggled to engage public and community interest – possibly because the socialisation efforts did not move *ba* from originating to dialoguing, leaving volunteers and representatives to focus their attention elsewhere.

### 8.5.2 E: Externalisation

A local resource guide is updated, copied on copy machines, and made available to a small cluster of GP surgeries in the local area. The team leader meets with GPs to encourage their use of the resource guides, and one receptionist particularly becomes known for using the document to signpost patients to local services in the community.

**Francine [WIL1A ]** “While they haven’t fed back specific examples, what they have said is, at this particular practice, the GP, one of the lead GPs, he refers at least two clients per week back to the receptionist for using the services, one or other of the services in the booklet, and the practice, as a whole, as an entity, they have embraced the idea and they’ve got delegated responsibilities to this receptionist. So while the receptionist doesn’t instigate the giving of information, they have – I don’t want to call it a ‘protocol’ because I don’t believe there’s something written down – but what they have is a process, and a lot of these referrals come via the GP.”

Unfortunately, this receptionist married and left her position, moving far away from the area. Although the example was exciting for others to hear, as a great utilization of receptionists, there are few similar examples noted. The resource guide was not widely replicated and no plans were in place to develop dissemination to a wider audience.

#### Noted features of this Externalisation stage:

- ✓ Innovative and locally tailored solutions can be generated in the externalisation phase but can easily lose momentum without systematic plans for rolling out the effort, particular needed is support to package and disseminate explicit knowledge, which can be small and focused.

- ✓ Initiatives can get 'stuck' in the externalisation stage as charismatic efforts by individuals are not 'taken up' with a process to carry it beyond passion and personality.
- ✓ Evidence of efforts at this stage may be word of mouth and highly qualitative in nature.

### 8.5.3 C: Combination

Plans to train receptionists were pursued, and the Initiative Leader spoke with the lead of health promotion who prompted training by the borough-wide training coordinator. First the training coordinator of the health trainers needed to identify access to GP surgeries and willingness to accept training – resistance was met at the level of the practice managers.

**Victoria [WIP38L]** “I think what happened was, a few months ago, as part of the Westpark Initiative, I was contacted by Chris, and it was to ask... he said that there were... he identified three practices that were interested in having some kind of signpost-type training for their receptionists. Actually only one of those was in Westpark... So with one of my staff, one of the health trainers, we developed a kind of training module. But prior to that, I spoke to the practices and I asked them how would be the best way to deliver this training, and what amount of time they would have. And for the [Westpark practice], I was told, 'Well, you need to come and show this training' – this was by the business manager – 'to myself and the practice manager. And we will review it, and then we will see if it's something we want for the receptionists.' For the [two Coxford] Practices, I was told that the only way to do it because of time and getting everyone together would be to come into one of their lunchtime practice meetings, and they will give us 45 minutes to an hour in their meeting, which I think they were about – I can't remember, but I think they were monthly meetings, I can't quite remember. And that we could offer it there.”

Developing the training then became a focus of the health promotion / public health group, which was not located at the PCT. Within their area of professional expertise it was not difficult to consider all of the local programmes to include in designing an informative module.

**Victoria [WIP38L]** "...So we did some brainstorming ourselves and with other people in the public health department about the type of things that we felt we should include in this signposting training. So we identified some key things, which was a summary of the health in Coxford, ethnic group distribution, information about PALS – Patient Advice and Liaison Services – especially as that was changing from where it was based and things. The NHS Coxford smoking cessation service, the mental health and wellbeing service, information about the NHS Choices website, information about Healthy Start, information about choosing a health programme, because under that programme there's a number of projects including ours. And then also a bit of information about how to arrange interpreting or translation services. And then a kind of contact list around healthy start vitamins, breastfeeding support, weaning, immunisations, overweight and underweight children, breast screening, cervical screening, bowel screening, diabetic retinal screening, smoking cessation, alcohol, healthy weights, and healthy lifestyle projects. So that was contacts. And this discussion involved all my colleagues in public health, because although we were going under our thing, it was like what from public health we felt... information we should give to these people."

Training sessions were developed and delivered – though notably not in Westpark.

Receptionists and GP surgery staff who could attend were informed about local programmes and interest was gauged as high by the trainer.

**Victoria [WIP38L]** "...So we did three training sessions, the first one on 16th June was in the [Coxford 1] Practice, and we had eight members from receptionists there, including one GP. On 29th June we went to [Westpark practice], and it was just the practice manager and the business manager. And then on 20th July we went to [COXFORD 2] Practice, and there were eight members of reception and mid-team there. After the training... so it was kind of showing them on the computer and then going through and then asking questions. We asked them to complete... the idea was, because I really felt this was like the first step, and probably they would want more after this, that was my own feeling. So we asked them to do a feedback form, but unfortunately we only got 8 out of 18 back. I had to keep trying to get more back, and for various reasons I didn't. I asked people what they found quite useful in the presentation, and some people knew about some things, and other people didn't. So you've got a mixed level of knowledge. But the key things that came out that people felt were quite useful were about this MEND project, which is a project for...there's a 5-7 and there's an older children's project. It's a weight obesity programme, it involves the whole family, it's quite an innovative thing. And they didn't know much about that, and they were quite wanting to know more about it. Then they were also interested in some general information about the different ethnic groups, because not everybody seemed to have a lot of knowledge about that. They were particularly interested about all the different resources that are available to patients. Because we were telling them about things that they weren't aware about, all these things."

Victoria notices that sustaining such a module is a concern, and despite her enthusiasm, and positive responses to the first delivered training sessions, Victoria is

already aware that other options should be considered for getting information, up to date knowledge, to a wider audience.

**Victoria [WIP38L]** "...The other thing that came up was there's so much information, how can we get up-to-date information, how can we do that. I think one way that's sort of been addressed now is with the introduction of extranet. I mean, I've got no admin help, I've got no, you know, if there's a particular thing, like these ones we've been in contact with. But the extranet I think is the sort of... that didn't come out of this, but it came out of other discussions. But I think that is one way, because they have access to that. Because the thing that came out to them was they wanted a general overview of the plethora of services available, because they knew about some, they didn't know about others."

**Noted features of this Combination stage:**

- ✓ Directed programme planning is not always able to get through the barriers presented by practice managers particularly if logistical issues such as staff time and space are not solved. Despite explicit attention to packaging appropriate material and tailored delivery, systemizing training can get blocked by individuals, particularly practice managers in primary care.
- ✓ Trainers in boundary spanning positions may be in an ideal position to identify innovative and efficient solutions to combine sources of explicit knowledge, such as the use of the extranet to provide up to date information systematically, but inability to secure resources and support can block initiative.

This trainer spent considerably trying to find out who and how to build up the extranet as a resource area, but the connections with the information technology structure were not clear. The receptionist-training programme did not develop, however a different using lay health advisors was being explored, and a GP-led series of workshops in local temples was developing, partially due to the particular use of a local dialect by a GP and Consultant in the local area. All such programmatic efforts struggled with affording meeting space, finding administrative support for invitations, flyers and logistical resourcing. Despite persistent availability of local knowledge assets, and interest in disseminating health promotional information in the community, all efforts relied on passionate individuals and struggled to gain systemization.

#### **8.5.4 I: Internalisation**

A paediatric social worker and commissioner of paediatric services describes the need to continually 'show up' at meetings to advocate for children's programmes, particularly

for teenagers aged up to 18 years, who can be missed by planning efforts that focus on younger teenagers. As a commissioner, the need to connect resources is a part of the job, but changing policies, redundancies, funding losses and local politics can make the work more challenging.

**Abby WIP36J** - There were many, and different things motivate you. Think about continuing care, so kids in the community who are extremely sick, extremely sick, possibly life-limiting but not always. If I think that I can actually meet the demand in a safe way, in a way that the parents and if appropriate the young person feels supports them and meets their needs, and doesn't make their life more complicated and difficult, and I can do that preferably under budget, and therefore give a few pounds back to the QIPP agenda effectively, to make us sustainable, then that motivates me. If I know my job so well that I can recognise that there's an inefficiency or a duplication, and I can get the people round the table who can actually say, 'Yeah, you're right,' and we can work together to put a pathway together that makes everything much more efficient, and again releases some capacity so someone can go off and do something else that's needed, or some money that we can reinvest, that makes me happy. Obviously there's the very obvious stuff, like if you get a letter and somebody says, 'You really helped,' that makes me happy.....You tend to get the verbal from the service provider. Little things like I was in a substance misuse meeting yesterday, and we've worked really hard to integrate two services who three years ago were competitors, and both thought the other one was doing a crap job, and they could do it better, and, 'Why don't you just give me the money?' And we've moved from they wouldn't talk and they had no pathway between them, and kids bounced between them, and they duplicated and it was all horrible, to the fact that they now call themselves part of one service. They've got a joint service name. They're co-located. They have a shared action plan. One is Tier 2 and one is Tier 3, and so they are very different, but they have a shared action plan about the bit in the middle, about training. And to one extent, one has got a... I mean, they're very, very small services, they've only got about three staff each. One has got a member of staff on long-term sick, and the other one voluntarily offered to cover some outstanding assessments so that the kids didn't have to wait. And just hearing them talk, and they're doing, 'Duh, duh, duh, duh, duh,' and wording this, 'Duh, duh, duh,' and, 'This is our action plan, and this is strategic duh, duh, duh.' Phwoar, fabulous. Then I had the manager who has always been very resistant to, 'What the hell are you coming and getting involved for?' saying, 'Well, the report you wrote for the other one was significantly better than ours, and it showed outcomes. We don't know how to write one like that. Can you help us?' That made me feel good"

#### **Noted features of this Internalisation stage:**

- ✓ Explicit knowledge from the professional (as social worker and as commissioner) becomes internalised as the individual applies socialisation skills in communicated with skill and passion with a variety of stakeholders *ba* is exercised, moving systemic knowledge through routine to feedback and back through the SECI cycle. Ideas progress and follow through.

- ✓ Freedom to adjust with exercising *ba* is demonstrated by an individual whose daily know-how is embedded in organisational routine which is empowered to respond to local needs
- ✓ Being able to respond using explicit knowledge and making it tacit can contribute to a higher sense of professional satisfaction, which builds motivation for effective multi-agency working.

### 8.5.5 Overall Movement through SECI for the Child & Family Case

For the Westpark Initiative, the Child and Family case struggled to define itself as a team, particularly since it represented a very broad agenda of joined up working and could potentially tap into a wide array of service sectors, leading easily to fragmented efforts. The first leader was no longer funded and left after one year, and the next leader was personally committed to children through a nursing background, but professionally focused as a commissioner on other adult areas. Membership also waned, with social care and community representatives tapping in to occasional meetings but unable to dive into a clear project, which might follow through with effective action that aligned with agency or professional objectives. Solutions and potential innovations surfaced in many different areas, from a variety of stakeholders, but without the team leaders serving in the middle as knowledge engineers, the team was unable to move to externalisation (Nonaka & Takeuchi, 1995). *Ba* was unable to move, and at the strategic horizontal junctions, knowledge, ideas and plans fell through the gaps.

## 8.6 SECI Cross-Case Analysis

In this section I will use the SECI framework to compare all four cases to each other and to identify how boundary spanning themes apply through the movement of different types of knowledge exchange.

### 8.6.1 Barriers and Enablers of Boundary Spanning

The four cases presented in Sections 8.2 to 8.5 above provide a sense of the process or journey of the four boundary spanning cases through the four SECI stages and illustrate key differences between the cases. The examples cited show how knowledge



exchange processes were facilitated (or were not facilitated) by the work of the four WI boundary spanning cases and the impact they had in terms of service integration. Enablers and barriers identified by the participants as presented in Chapter 7 and Chapter 8 are summarised below in Figure 14.

**Figure 14 Boundary Spanning Themes vis-à-vis SECI**

Boundary Spanning Themes vis-à-vis SECI			
Enablers	Barriers	Enablers	Barriers
<ul style="list-style-type: none"> <li>• Supervisor permission</li> <li>• Multi-disciplinary events</li> <li>• Facilitated Social exchange</li> <li>• Attitude: 'enthusiasm'</li> <li>• Culture of Teamwork</li> <li>• Charismatic leader</li> <li>• Experiential learning</li> <li>• Patient feedback</li> <li>• Perceived political support</li> <li>• Invitation to dialogue</li> </ul>	<ul style="list-style-type: none"> <li>• Supervisor refusal to support participation</li> <li>• Time shortage</li> <li>• Money concerns</li> <li>• Cost of meeting space</li> <li>• Attitude: 'waste of time' /this never works</li> <li>• Perceived turf separation</li> </ul>	<ul style="list-style-type: none"> <li>• Facilitated Dialogue</li> <li>• Interactive Skill Building</li> <li>• Visioning activities</li> <li>• Table Talk exchanges</li> <li>• Shared learning</li> <li>• Mentoring examples</li> <li>• Professional Dev. Credit</li> <li>• Practice managers</li> <li>• Supervisors</li> <li>• Anticipating productivity</li> </ul>	<ul style="list-style-type: none"> <li>• Strict agenda</li> <li>• Lecture only content</li> <li>• Political 'jockeying'</li> <li>• Defense of Turf</li> <li>• Administrative hurdles</li> <li>• Specialty terminology</li> <li>• Language barriers</li> <li>• Accountability debates</li> <li>• Practice managers</li> <li>• Supervisors</li> </ul>
Enablers	Barriers	Enablers	Barriers
<ul style="list-style-type: none"> <li>• Ability to develop as professional/cross-train</li> <li>• Mentored leadership</li> <li>• Responsive measures</li> <li>• Meaningful measures</li> <li>• Ability to continue successful aspects</li> <li>• Continuous Reflection</li> <li>• Experiential Learning</li> <li>• Thoughtful routine</li> <li>• Continuous Improvement</li> <li>• Entry into socialisation</li> </ul>	<ul style="list-style-type: none"> <li>• Continuous Reorganisation</li> <li>• National Policy uncertainty</li> <li>• Funding uncertainty</li> <li>• Focus on structure and templates, not quality</li> <li>• Mindless routine</li> </ul>	<ul style="list-style-type: none"> <li>• Facilitated problem-solving events with skilled liaisons</li> <li>• Action orientation</li> <li>• Realistic Deadlines</li> <li>• Supportive Peer Pressure</li> <li>• Short small goals set/met</li> <li>• Useful tools to collect data</li> <li>• IT solutions that work</li> <li>• Scheduled regular meetings</li> <li>• Informing policy making</li> </ul>	<ul style="list-style-type: none"> <li>• Vague or absent vision</li> <li>• Lack of role clarity</li> <li>• Lack of support for job</li> <li>• Task orientation without alignment to vision</li> <li>• Ineffective software</li> <li>• Inappropriate attention to data collection</li> <li>• Inordinate focus on negative/absent results</li> </ul>

Although the four teams were invited to the same annual cycle of facilitated learning events, they varied in their ability to exchange knowledge across boundaries and then implement improvements. Given a turbulent context (i.e. a lack of sustained leadership and inconsistent membership of three of the teams coupled with wider systemic changes) it is predictable that some of the unsuccessful boundary spanning attempts and efforts to facilitate vertical integration in particular appear to be specifically challenging at the juncture between externalisation to combination (from dialoguing to systemizing). Only one of the teams - anxiety & depression in BME populations - managed to galvanise themselves in the face of a largely adverse context and 'keep

going' through almost all of the SECI stages. As a positive outlier, this one team appears to have successfully managed - in the face of the same external challenges faced by the other three teams - to blend the boundary spanning activities enabled by the WI together with the rigour and structure demanded by the CLAHRC, leading to the improved horizontal integration of primary and mental healthcare services. When looking across all four cases, and examples from each of the four SECI stages, a number of common themes can be identified:

- 1) Socialisation is only a start, and the noted enthusiasm of this stage during new initiatives cannot sustain change without moving towards more explicit forms of knowledge
- 2) Individuals can be well placed as boundary spanners during each of the transitions between the four SECI stages but the type of *ba* these liaisons bring will vary by their personality and experience within and external to the organisation in which they work
- 3) Inserting / assigning individual professionals into boundary spanning positions between organisations does not solve collaboration problems, though it may be perceived as a promotion by the individual
- 4) Professional satisfaction (as prompted by internal motivation) is increased in situations where explicit knowledge can be applied to directly impact outcomes, and there is support to respond with expert flexibility.
- 5) Innovative solutions can surface in any of the four SECI stages, and from any stakeholder, but the type of solution proposed will depend on the type of *ba* active at that stage.
- 6) Professional exchanges of expert knowledge, which is built into cross-organisational or cross-sectoral routine, can prompt discovery of innovative collaborative solutions, and may contribute to sustained improvements
- 7) Horizontal and vertical integration efforts appear to 'stick' between Externalisation and Internalisation when efforts to systemise combined forms of knowledge hit political and logistical barriers
- 8) Top down initiatives have the appearance of routine knowledge assets but can either be disintegrated or further evolved by movement into the originating *ba* and socialisation stage

First, I would note that (1) socialisation is only a start, and the enthusiasm of individual staff during this stage cannot be sustained without a successful transition to more explicit forms of knowledge that can be shared with groups (not least because professional satisfaction appeared to increase in situations where explicit knowledge

could be applied to directly impact outcomes). Socialisation can be successfully accomplished through the generation of enthusiasm and professional curiosity at stakeholder meetings - although even this may not be easy given time pressures and conflicting priorities - but the opportunity is brief and gaining sufficient traction to carry integration efforts forward can be challenging. Socialisation processes can also be time-consuming, particularly if boundary spanning interventions are required to engage with multiple professional groups at different times. Although individual boundary spanners could be well placed during each of the transitions between the four SECI stages, (2) boundary spanners' success in helping to combine and internalise knowledge seemed largely dependent on their own individual capabilities and capacity, both within and external to the organisation in which they worked. Also (3) inserting professionals into boundary spanning roles through promotion was not a quick fix for such complex systems. Trust in expert competence took time to build through formal and informal socialisation, exchange, and dialogue. Boundary spanners who were able to (4) respond with expert flexibility to the situation at hand were more likely to find professional satisfaction in their work, and be more motivated to positively and directly impact outcomes.

Secondly, although clinicians, staff, and managers clearly recognised that socialisation was only a first step to empowering quality improvement efforts, the majority of the four teams I studied did not progress far beyond this stage. (5) Innovative solutions can surface in any setting or stage, especially when brainstorming conversations are facilitated. However, I observed instances of innovative solutions to healthcare system problems emerging from the community but when they were not heard and acted upon then community members quickly withdrew their commitment and interest. Administrators and managers in liaison roles can serve as boundary spanners between different professions but without successfully forming boundary spanning teams such individuals were left in a position of oversight of heterogeneous multidisciplinary groups that lacked shared goals and clear working processes; subsequent efforts to make tacit

knowledge explicit (externalisation) were then undermined. (6) When professional exchanges were built into cross-sectoral routine it was more likely that collaborative solutions would surface to be built into sustained improvements.

Thirdly, for those teams or boundary spanning individuals who did manage to externalise knowledge (and innovative solutions did surface in all of the four teams), (7) horizontal and vertical integration efforts often appeared to 'stick' between the combination and internalisation stages of the SECI model. It was common for efforts to systemise combined forms of knowledge - then to hit political and logistical barriers. Despite explicit attention to package knowledge assets appropriately and to tailor delivery, systemizing knowledge through, for example, training was blocked by influential individuals at the local level (for example, practice managers at GP surgeries in primary care). Boundary spanning individuals may be in an ideal position to identify innovative and efficient solutions to combine sources of explicit knowledge, such as the use of an extranet to provide up to date information on a range of services specific to a particular patient condition, but can be undermined by their inability to secure system resources and support. Although (8) top-down leadership and macro level policy may appear to be the type of routine knowledge assets that can enforce change, applying local understanding and adapting to current needs requires a continued level of socialisation.

### **8.6.2 Multi-Level Cross Case Analysis**

Overall, the SECI model has been a useful lens through which to view the qualitative data particularly in terms of thinking about *processes* of knowledge exchange across various boundaries. Boundary spanning themes were gathered from the coded qualitative material, as were SECI themes. Cross-comparison of the themes resulted in a series of enablers and barriers that appear to match the dynamic efforts of multidisciplinary teams moving through the stages of knowledge exchange explained

by the SECI framework. When considering each case, these same themes help to identify the overall SECI stage to which the team had progressed (see Figure 15).

**Figure 15 4 Cases: Boundary Spanning Themes vis-à-vis SECI stages**

### 4 Cases: Boundary Spanning Themes vis-à-vis SECI

Enablers	Barriers	Enablers	Barriers
<ul style="list-style-type: none"> <li>Supervisor permission</li> <li>Multi-disciplinary events</li> <li>Facilitated Social exchange</li> <li>Attitude: 'enthusiasm'</li> <li>Culture of Teamwork</li> <li>Charismatic leader</li> <li>Experiential learning</li> <li>Patient feedback</li> <li>Perceived political support</li> <li>Invitation to dialogue</li> </ul>	<ul style="list-style-type: none"> <li>Supervisor refusal to support participation</li> <li>Time shortage</li> <li>Money concerns</li> <li>Cost of meeting space</li> <li>Attitude: 'waste of time' /this never works</li> <li>Perceived turf separation</li> </ul>	<ul style="list-style-type: none"> <li>Facilitated Dialogue</li> <li>Interactive Skill Building</li> <li>Visioning activities</li> <li>Table Talk exchanges</li> <li>Shared learning</li> <li>Mentoring examples</li> <li>Professional Dev. Credit</li> <li>Practice managers</li> <li>Supervisors</li> <li>Anticipating productivity</li> </ul>	<ul style="list-style-type: none"> <li>Strict agenda</li> <li>Lecture only content</li> <li>Political 'jockeying'</li> <li>Defense of Turf</li> <li>Administrative hurdles</li> <li>Specialty terminology</li> <li>Language barriers</li> <li>Accountability debates</li> <li>Practice managers</li> <li>Supervisors</li> </ul>
<b>Dementia case</b> <b>S</b>		<b>Child &amp; Family Services case</b> <b>E</b>	
Enablers	Barriers	Enablers	Barriers
<ul style="list-style-type: none"> <li>Ability to develop as professional/cross-train</li> <li>Mentored leadership</li> <li>Responsive measures</li> <li>Meaningful measures</li> <li>Ability to continue successful aspects</li> <li>Continuous Reflection</li> <li>Experiential Learning</li> <li>Thoughtful routine</li> <li>Continuous Improvement</li> <li>Entry into socialisation</li> </ul>	<ul style="list-style-type: none"> <li>Continuous Reorganisation</li> <li>National Policy uncertainty</li> <li>Funding uncertainty</li> <li>Focus on structure and templates, not quality</li> <li>Mindless routine</li> </ul>	<ul style="list-style-type: none"> <li>Facilitated problem-solving events with skilled liaisons</li> <li>Action orientation</li> <li>Realistic Deadlines</li> <li>Supportive Peer Pressure</li> <li>Short small goals set/met</li> <li>Useful tools to collect data</li> <li>IT solutions that work</li> <li>Scheduled regular meetings</li> <li>Informing policy making</li> </ul>	<ul style="list-style-type: none"> <li>Vague or absent vision</li> <li>Lack of role clarity</li> <li>Lack of support for job</li> <li>Task orientation without alignment to vision</li> <li>Ineffective software</li> <li>Inappropriate attention to data collection</li> <li>Inordinate focus on negative/absent results</li> </ul>
<b>Anxiety &amp; Depression case</b> <b>I</b>		<b>Diabetes case</b> <b>C</b>	

The dementia case was essentially pinned at the socialisation stage. They were particularly blocked in creating infrastructure for lasting knowledge exchange in explicit forms, despite translating the mini-mental status exam into a common Asian dialect and GP-led training sessions for GPs about dementia screening. The child and family services case was able to create a community resource guide to share with patients, via receptionists, but was unable to move forward into creating lasting products or receptionist training programme beyond the initial impact. They were 'stuck' at the externalisation stage without formalised leadership and a clear action-oriented vision. The diabetes case spent much time in the externalisation and combination stages, endeavouring to build the infrastructure for vertical integration of services provided by hospital specialists based in the community. Combination goals were achieved through

much dialogue, and expert knowledge assets were put into place as hoped, but yet to be fully internalised.

The anxiety & depression in BME population case appeared to be most successful overall, perhaps because it inherited a clearly defined goal, and received structured support, despite persistent internal reorganisation. Indeed some of these integrating efforts of this team were in place prior to the WI, but many innovative solutions were generated by the case as prompted and developed after interactions with the WI. This case had aspects of the internalisation stage in place, but by early 2012, the team was struggling to keep the local infrastructure intact. None of the four cases - with the possible exception of this case - could claim to have embedded routines within organisational culture and explicit skills in daily operations (internalisation). None of the four cases moved through the SECI spiral from routine internalisation into the originating *ba* level of renewed socialisation.

## **CHAPTER 9      Discussion**

### **9.1      Introduction**

In this chapter, I will present cross case comparisons to elucidate the findings in light of the research questions under study. Section 9.2 presents the findings as related to accomplishing horizontal and vertical integration. Section 9.3 presents lessons to be learned from boundary spanning. Section 9.4 discusses how knowledge exchange is enabled. The following sections then extend the learning from the results, including implications for leading quality improvement efforts and, in Section 9.5, reflections on the research methods that may be adaptable for future use.

### **9.2      Accomplishing Horizontal and Vertical Integration**

Staff members from the four cases were invited to the same facilitated learning events (socialisation); however, the four cases varied in their ability to implement improvements or accomplish integration. The Child and Family Services case had early success with cross-boundary and horizontal integration efforts through making a resource guide available and envisioning efforts where receptionists could signpost self-referrals to local community. Vertical integration was not a goal of this team. Horizontal integration was a long-term goal by many individuals working in the community and primary care sectors, but traction was not accomplished by this team, likely due to a lack of clear goals and cohesive teamwork.

The dementia case similarly struggled to achieve desired horizontal or vertical integration goals. Despite placing key boundary spanners in planned positions for integration, this team was not able to create systemic knowledge assets to facilitate the transfer of explicit information across boundaries (externalisation / combination), nor were they able to develop local measures to understand their own effectiveness. Despite positive individual and within-team experiences, missed opportunities for sharing disciplinary expertise were observed at professional, sectoral, and organisational levels.

The diabetes case had measurable goals defined by QOF, which were not directly attributable to efforts to integrate services. They also had long-range goals that appeared to be too big to accomplish, especially given that throughout the study information withholding by individuals and departments was evident. Issues of accountability and jurisdiction concerns were observed, confirming findings of previous studies based across organisational boundaries in the NHS (Currie, Finn & Martin, 2007). Horizontal and vertical integration were directly being challenged on a regular basis by the case leader with the explicit goal to make integration happen. Horizontal integration, particularly with community-based ophthalmology and podiatry appeared to be challenged less by issues related to competition for funding. In contrast, vertical integration with the hospital, especially in the goal to bring a level of specialist care into the community, was a major challenge accomplished only after the study period ended.

The anxiety and depression team succeeded in reaching self-defined goals (referrals of Asian patients with anxiety & depression increased (by a reported 939%). Innovative solutions to increase access to mental healthcare were evident in a variety of local efforts to increase awareness of services amongst patients and providers. Informal (internal) and formal (external) support for frequent team meetings and time to reflect on the impact of their outreach efforts on referral rates enabled this team to improve horizontal integration with local general practices through information dissemination (externalisation), link workers (combination) and embedding routine knowledge assets (internalisation). Efforts at vertical integration pre-existed the WI, but were already well in place as cross training between acute services and home based services were appreciated by the mental health staff and team members. This team had many success factors in place to support their efforts to integrate services, and as a measure of their success, they disseminated their learning through three research posters at an international conference in mid-2012.



When considering integration efforts, especially in the NHS, there has long been a tendency to consider the adoption of networks as a form of organisation. Theorists have suggested that networks that emphasise service variety and choice will require increased flexibility and more learning with a faster pace of change (Ferlie & Pettigrew, 1996). Strategic alliances through which experiential knowledge can be conceptualised would be important in factors for managing in such networks (Ferlie & Pettigrew, 1996). In the current policy environment of NHS England, boundary spanning structures have been created to span stakeholder groups, and connect with larger networks across the health system. As announced online in the NHS England News, on 25 January 2013, (available at: <http://www.england.nhs.uk/2013/01/25/clinical-senates/> accessed 29 August 2013):

“Clinical Senates will span professions and include representatives of patients, volunteers and other groups. They will work with Strategic Clinical Networks, Academic Health Science Networks, Local Education and Training Boards and research networks to develop an alignment of these organisations to support improvements in quality.”

In this manner, work across the UK health system to build multi-disciplinary learning networks continues, and lessons about boundary spanning processes are more pertinent than ever.

### **9.3 Learning from Boundary Spanning and SECI**

In the literature review in Chapter 2, I identified three main themes regarding boundary spanning in healthcare, including the need for: a wide range of communication skills, formal and informal role negotiation, and the recognition of social and political contexts. Although the literature was descriptive, few impacts on patient outcomes were directly recognised. The meta-ethnographic analysis set a basic but limited framework for understanding boundary spanning processes in dynamic healthcare settings.

In revisiting the aspects of boundary spanning as identified through coded interview data in Section 7.5, more detail surfaced. The preconditions for boundary spanning include: professionals who can adapt, information that diffuses, methods of

communication that are negotiable, supervisors who cultivate staff independence, and expert competence that can be interpreted with legitimacy to others. The barriers to boundary spanning include: administrative protocol or policy expectations that freeze meaningless action, supervisors who deny the benefits of integrated working, perceived inequities which prompt high-achievers to retreat or shut-down, and uncertain expectations which cause anxiety and defensiveness. Boundary spanning efforts which appear to overcome barriers include persistence through compromise, troubleshooting, creative solutions, assertive efforts to 'do the right thing', and seeking transformation through education. I view boundary spanning as an action, so verbs are used in these detailed themes to orient the conceptual analysis to considering movement over time.

The barriers and enablers of boundary spanning presented in Section 8.6.1 and Figure 10 are juxtaposed for a multi-level analysis. The SECI model is useful, not just because it enables the study of interactions across different system levels (from individual to team to organisation), but also because it is particularly sensitive to nuanced interactions between and across these system levels: the boundary spanning processes where knowledge exchange takes place. SECI is therefore important not primarily for its explanatory potential (although it is helpful in this regard) but for how it helps in the empirical study of boundary spanning processes. In particular, as I reflected on how each of the four boundary spanning teams had - or had not - moved through the four stages of SECI I began to ask different questions from those addressed by previous studies. Primarily these questions took the form of asking through which processes the WI as a boundary spanning intervention had enabled each of the teams to transition between socialisation - externalisation - combination - internalisation, and where teams had become 'stuck' what barriers had they struggled to overcome (and could the WI have done more to help them?).

#### 9.4 Enabling Knowledge Exchange: Why Context (and 'Ba') Matter

A central factor that shaped the outcomes of the WI as a boundary spanning intervention was the role of 'context' - both local and national - and one that I explicitly included in the overall evaluation framework for the Westpark Initiative (Nasir et al, 2013). The earlier descriptions of the SECI model take no account of 'context' though later extensions incorporate this as a factor in explaining knowledge exchange processes and the contribution to the understanding of the varied success of the four cases studied.

The various conceptualisations of 'context' originate, largely, in the variety of different perspectives that have been brought to bear on the question of its role (for example, organisational studies, social psychology, and knowledge management and innovation studies). These different perspectives have led to different methodological approaches to studying context; broadly, on the one hand, researchers have viewed contextual factors as discrete variables that can be measured; and on the other hand, others view 'context' as a set of processes that relate both to each other and to change/improvement. By adopting Pettigrew et al.'s definition (Pettigrew, 1990) my study fell firmly into the latter camp:

Context refers to the 'why' and 'when' of change and concerns itself both with influence from the outer context (such as the prevailing economic, social, political environment) and influences internal to the focal organisation under study (for example, its resources, capabilities, structure, culture and politics).

The importance of micro, as well as meso, contextual factors are notable in the present study. Similarly for Nonaka and colleagues, *ba* and the motion between stages addresses the context for knowledge exchange.

Although the four SECI stages initially provided a useful analytic lens, the concept of *ba* has been more helpful in explaining the differences between the stories of the four boundary spanning teams by highlighting the role of context. For knowledge to be

created, interactions must happen, and boundaries are transcended in a complex and rather fluid motion of evolving possibility (Merrill, 2000).

The distinction between the role of structural and psychological contextual factors at different levels (macro, meso and micro) of a healthcare system is therefore also reflected - *to a degree* - in later elaborations of the SECI model and - importantly for this study - explicitly linked to how knowledge exchange processes are enacted and different types of knowledge assets. I say 'to a degree' because the familiar macro-meso-micro distinction blurs some of the micro-psychological interactions that take place between different system and organisational levels; hence the importance of individual boundary spanners and spanning processes. Although boundary spanning should not be seen solely as an individual role or activity, I also question the implication that 'micro' personal-psychological interactions take place only at the organisational margins. By evaluating the efforts of the WI, it appears that such interactions do indeed create important (network-like) linkages within and between systems and organisations, and not solely in the shape of individual boundary spanners. Fischer's article, (2012) similarly argues that interactions take place in liminal areas at the 'interstices of social relations' where experiences, emotions, and ideas are exchanged across individual, group and organisational levels. These liminal areas may function as "formative space(s) in which authentic, mutual relations develop, useful for organisational productivity". Their interactions are not confined to micro-level (frontline) areas, but may be generated and exchanged across different organisational levels, such as in conditions of organisational turbulence (Nasir et al., 2013).

## **9.5 Leading Quality Improvement Efforts**

Martin Wood (2010) has written that process studies are still in a liminal place in the social sciences. When examining leadership in health care, he suggests that studies should consider the *processes* of individual leaders, and interpersonal leadership, as well as considering leadership as *process* (p. 18). Wood suggests that the study of

process thinking should recognise social exchanges and he positions the critical examination of leadership roles into the interpersonal context (Wood, 2010).

In a comparative case study of two pilot sites for cancer-genetic services in the NHS, it was found that interorganisational networks require multiple forms of leadership, both distributed and dispersed, to engage a wide range of stakeholders (Martin, Currie & Finn, 2008). These researchers (authors who are well represented in my boundary spanning literature review), found that participants, structures, and processes are all important aspects of service delivery in the healthcare context, but informal knowledge and socialisation is what determines professional behaviour change. Although weak on evidence, this study suggests that distributed leadership within a dispersed agency for change can be accomplished by a successful and complimentary pairing of different types of leaders within collaborative networks (Martin, Currie & Finn, 2008). As my study confirms, socialisation plays an important role in knowledge exchange for professionals, and distributed leadership supports knowledge sharing.

Von Krogh, Nonaka, and Rechsteiner (2012) have recently argued that the role of empowerment and combinations of distributed or shared leadership are not well explored in the current literature, but need to be. Distributive leadership can initiate and shape activities and conditions by allocating resources, defining vision, and describing organisational forms to link contexts, assets, and processes within and across the organisation. An individual's knowledge must enlarge, and a leadership that promotes all four modes of knowledge conversion implies room for effective communicators to develop new concepts and new kinds of verbal and non-verbal language. An enabling characteristic of the organisational knowledge creation process includes chaos or fluctuation in which crises are presented as problems needing new solutions. The challenge requires reflection and deep mutual trust, or else there will be destructive, not creative chaos (Nonaka, 1994). Von Krogh and colleagues (including Nonaka) therefore propose a leadership framework that combines centralised (planned,

autocratic, directed) and distributed leadership (participative, spontaneous and fluid) for spanning organisational boundaries, since negotiating boundary crossings is often problematic (Von Krogh et al., 2012). But little research has described how leaders can integrate SECI, knowledge assets and *ba*. The authors call for more attention to be paid to discovering the “form and function of ‘boundary negotiations’” (Von Krogh, Nonaka & Rechsteiner, 2011, p.30). They also highlight the lack of research which combines the micro- and macro- levels in organisational processes, arguing that knowledge is not strictly individual or collective, and knowledge creation interactions should be examined at all levels (Von Krogh et al., 2012).

Through the present study and its attention to such boundary negotiations at multiple levels, I found that individuals can play important roles in blocking or enabling the flow of knowledge between professionals, and at the organisational level. Much of the potential energy for quality improvement is perpetuated by internal motivation, and blocked by managerial or supervisory controls. At the sectoral level, particularly when attempting vertical integration, professional hierarchy and status, as well as concerns for final accountability for patient safety, can impede the movement toward mutually beneficial solutions. Leadership is important, but not the only factor.

## **9.6 Methodological Critique and Reflections**

As with any qualitative study, especially one as contextualised as this one, generalisability is a concern. Ethnographic methods offer rich insights, and there are more insights from this study than I could capture in this thesis. Attempts to address such limitations were addressed primarily by examining the diary, interview, and focus group data for convergence or discontinuities in view of the same activities. Also, having monthly oversight meetings with my research advisors helped to offer continuous expert perspective at all stages of the research process, including scoping, instrument development, data collection, and data analysis.

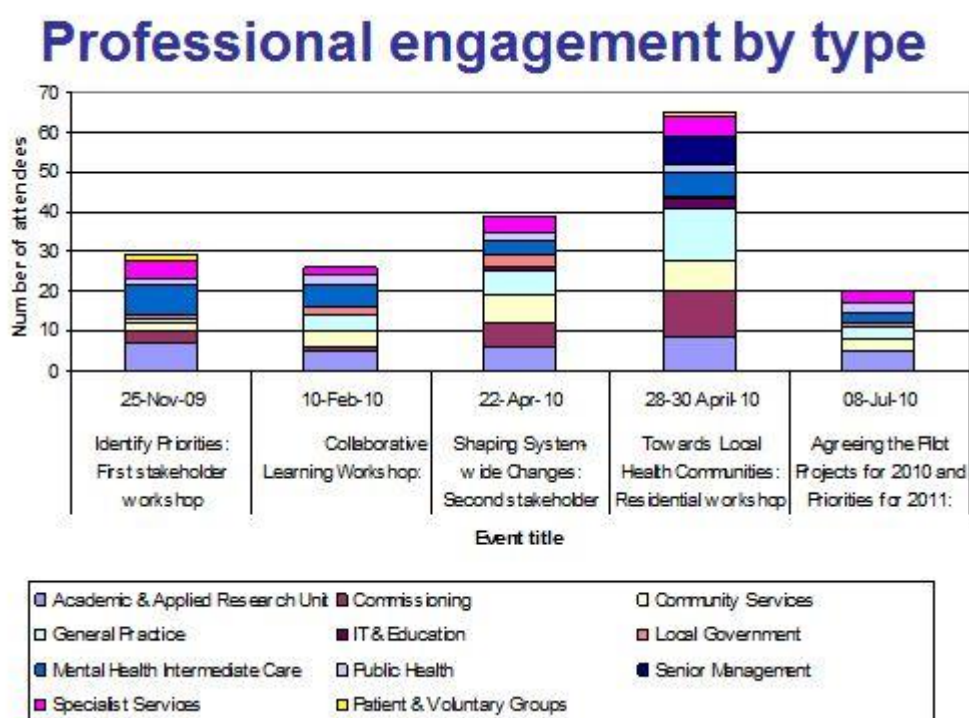
### 9.6.1 Embedded Clinician Researcher

The 'language' and 'culture' of healthcare is held in a shared scientific common parlance, and discussions around the practice of patient care strike a familiar tone for me. This commonality provided an advantage in identifying the meaning of certain professional actions within the context of healthcare. Alternatively, there is also a distinct advantage to being an outside observer of a healthcare system; in my case, as an American doing research in England. Being an outsider can lend a certain level of self-consciousness which takes no observation for granted, and though not truly objective, can suggest a certain appropriate stance of questioning assumptions. I was able to make inquiries into 'who' the actors are, 'where' they function, 'how' the work is done, and ask 'why' work happens in such ways, all while risking fewer suppositions based on inside experience. In this way, the position of an ethnographic researcher inside a new territory supplied few fixed conceptual underpinnings. Without assumptions, I could follow an open path, which risked false understanding, but had the potential for richer and deeper description of phenomena.

The advantages of being embedded as a researcher with a clinical background cannot be underestimated. My ability to build on-going rapport with clinicians and staff in the field required an ability to understand the 'cultural' language of the environment, which included scientific, clinical, and managerial terms. Having a deep level of understanding allowed me as a 'close to' researcher to identify with multiple contacts, and contexts, with a 360-degree perspective across sectors. From the scoping phase through to early instrument piloting, participant input was sought and instruments were produced with a local adaptation, which also increased 'buy-in' for on-going practical logistics and realistic stakeholder viewpoints. Knowledge of the typically complex pathways for patients in primary care and across boundaries also made it more likely that I could identify interspaces to pursue a wide range of staff roles to interview, for example speaking to mental health professionals in primary, secondary, and tertiary care settings.

In many ways, I served the dual role of academic and professional collaborator, which enabled feedback loops to the iterative process being used by the teams. Sharing my recorded notes with the participants themselves allowed for rich layers of meaning to develop, and reinforced the model of reflective practice to the practitioners. As interdisciplinary solutions evolved, instruments could be tailored to the setting, with multiple 'inside' perspectives represented in the drafting process. As the teams developed understanding of their own intervention efforts for quality improvement, data collection methods were iteratively discussed, shared, and modified. For example – at the stakeholder meetings attendance and a count of heads was collected. I worked with a member of the early leadership group, Sharon, to also add participant roles to the sign in sheet, allowing us all to examine the multi-disciplinary representation at the meetings (see Figure 16 created by Sharon [WIA16P] - PBC Manager).

**Figure 16 Professional engagement by type at WI meetings**



Further, I had the distinct advantage of being present for almost three years longitudinally across the setting, and through the dissemination of findings. Serving as a process historian, despite many staff redundancies in the field, meant that



participants would invite me to events and call me for confirmation of what my perspective had been overall.

Being able to gain on-going perspective and adapt evaluation methods could be advantageous for any embedded researcher who would be able to see the minutiae of efforts to solve local problems. Co-designing the instruments to match the research approach can benefit all involved – both stakeholders and researchers – which then can be extended to data sharing and co-interpretation of the results. Determining the ‘right’ data to collect streamlined the management, research, and academic purposes of properly capturing and describing the impact of interventions. In this manner, I gained by the mutual observation of individual and organisational learning processes as they overlapped in a local context.

Researcher reflexivity is an important aspect of the ethnographic method, requiring that the researcher acknowledge that their presence affects the phenomenon and that the field will affect the researcher. As a nurse who is a researcher then, I also had a dual identity, which further complicated the level of reflexivity required for me as, a participant observer (Allen, 2004). I explored the dilemmas that arose in exploring the stances of familiarity and distance in my field notes, along with other observations in the field. It is clear that there is always a dialectic in the stance of the researcher as ‘insider’ (a clinician who speaks the language) and ‘outsider’ (a researcher who is only occasionally involved).

The disadvantages remain. Researchers, particularly in long-term contexts can become caught up in local details, politics, and tensions, which may result in missing larger themes. Pressures were placed on me from stakeholders to report premature analysis or hedge reports in certain directions to fit current needs. I scheduled meetings with my research advisors for overview planning, and reflective research methods helped me to consider my responses, and counter such tendencies.

### 9.6.2 Interdisciplinary Research

An important issue to address has been how multidisciplinary and collaborative research can enhance the detail of data and understanding. Working with collegial research colleagues from other disciplines has provided me with a productive environment for generating themes and enriching understanding. Expanding from this experience, it is hoped that the instruments developed for this study may be adopted and adapted for use in other settings.

Models of describing the theory and methods for field research in organisational change studies have some roots in the early 1970's. The prominent author in the boundary spanning literature, Michael Tushman wrote in 1974 that interdisciplinary approaches have an important place, particularly in developing the systematic use of interpersonal and structural approaches to understanding organisations. He also used case studies as an exploratory method and writes of the critical need for researcher flexibility in trying to make sense of the frequent changes that happen in organisations. In describing his own field research in an organisation, using interviews, historical documents and observational data, Tushman states that, *"Probably the most important contaminant is lack of detachment. In an exploratory field study, the investigator runs the risk of becoming so involved in the process that a non-observing participant."* (Tushman, 1974, p. 84). Sense-making in such research is an intricate process.

The creation of knowledge and its transfer across the institutional boundaries between academics and practitioners has long been known to be problematic. Managers have not often been thought of as turning to the literature for an evidence base, nor have researchers been known to seek the advice of practitioners when designing organisational studies. Although tensions and conventional complacencies may need effort to be overcome, authors Rynes, Bartunek, and Daft (2001) suggest that professional associations should invite interaction between academics and practitioners, and journal editors need to widen their rhetorical strategies to include a

wider fertilization of ideas. The complexity of healthcare organisations, and the flux of constant change in a variety of settings, argues for a co-production, or co-research approach for developing organisational theories. Academics and practitioners both have valuable perspectives in translating phenomena in the field to conceptual understanding (Benington & Hartley, 2004).

An editorial in an American dementia journal by a Canadian physician suggests what is increasingly becoming clear in the methodology literature: educational interventions that are designed conjointly with family physicians and specialists can offer creative solutions that serve all well (Feldman, 2009). Collaborative care has long been touted as a solution for better patient care, the collaborative design of referral mechanisms takes multidisciplinary care to an organisational level that is increasingly the focus of interdisciplinary research efforts. The field-based co-design of research instruments, taking into account a variety of stakeholder perspectives, then is an appropriate development in ethnographic research methods, and so was effectively included in this study design.

A co-research methodology can be professionally stimulating and highly productive due to the engaging style and commitment required to maintain a collaborative stance, particularly when stakeholders are involved in the process. Interviewees understand that academics and practitioners are interested in their perspective, which can be motivating. In this study, it also meant that I was actively modelling embedding research in practice. Managing this sort of collaborative research relationship requires the ability to harness the curiosity, insights and practical wisdom of co-researchers, while also managing potential tensions, and ensuring rigour (Benington & Hartley, 2004). In this way, there were both limitations and benefits to the sense-making that I offered as an inside-outsider, and what my perspective offered was strengthened by the reflections from members of the internal culture, adding dense meaning to the inquiry. Although not suited to all research questions and settings, where there is a

constructive dialogue, this method can be satisfying for all parties, as it was beneficial to this study, and is suggested for future studies.

### **9.6.3 Staff Diaries**

Research diaries are a useful way to capture participant perspectives and reflection with a sense of immediacy over time, with personal details and style, in a format familiar to many who may have kept a personal diary or journal at some point in their lives. In the research literature, many published diaries have been quantitative in nature, but more open-ended research diaries are also appearing in the literature.

One sociological researcher in primary care reported use of a diary-interview method as being useful for gaining access to informants' experiences that a researcher is generally unable to observe. Unstructured diaries, followed by interviews, allowed the researcher insight into patients' thoughts and intentions, as well as their health activities – also to check the internal consistency of accounts. In this study, Elliot (1997) also elicited what is called 'mutedness' or the hidden accounts that may not fit into structured categories from the researcher's point of view, which was particularly useful for describing the sensitive aspects of experiences of mental illness.

Online diaries are a relatively novel development in qualitative research and have the advantage of capturing the on-going insights of the participants. In an interesting study of research-based practices in primary care, online diary "rooms" were created with the technical assistance of the Agency for Healthcare Research and Quality (AHRQ) in the US and staff maintenance of 15 person/hours per week. "Diary keepers" were identified in teams, and shared password-protected access to online pages where they could post comments and review others' commentaries. Participants were reminded to post diary entries every two weeks in this particular study, yielding 592 diary entries from 57 team members. Diary entries were evaluated for quality and analysis revealed emergent themes. Benefits of this method included participant reflection and a record participants could use for gathering publishable thoughts. Drawbacks included the

requirement of time-intensive effort, needs for high levels of technological support, and difficulty linking diary data to other evaluation data. The authors, Cohen, Leviton, Isaacson, Tallia and Crabtree (2006), described adapting their method by adding a Likert-type scale to the diary template to rate practice assessment to be combined with open-ended observations, but had no reports of this improved method to report. My experience with using online diaries confirmed these findings.

Serial diaries may have an important role in future primary care studies of health service provision, and as adjuncts to organisational learning. I found that serial diaries could be practically delivered in hard copy or in online formats. I had hoped the method would allowed for the type of rereading that befits a journaling process for the writer, however not every participant had time to re-read their own diary entries, nor did they express the desire to do so. For me as a qualitative researcher, the minutiae of staff decisions, their learning over time, and their adaptive behaviours were captured longitudinally and with great richness of first-hand description. There were noted advantages, which created feedback loops and iterative confirmation of understandings and assumptions made by both researcher and participant. Reflection was prompted in the staff participants in which they can recognise barriers to effective patient care transitions, and highlight successful efforts, especially those which are not able to be captured by quantitative data sets (such as referral rates or QOF indicators). I witnessed participants during diary follow-up interviews connecting their own thoughts and experiences about quality improvement efforts. These insights can be useful to the individual staff member, and I believe diaries have great potential to be redesigned as a tool that is incorporated into annual review as a non-punitive measure of professional development. One participant did mention collecting copies of her interview transcripts and considered the potential for her diaries to be a part of her self-reflection for her own annual review.

However, disadvantages of the use of diaries, particularly those repeated serially over many time points, includes researcher time to send individualised reminders, collate responses, and analyse narrative responses. There is also a distinct disadvantage in scheduling time to write, which may be lengthier than with a survey method. Supervisor support for this effort was crucial and not always recognised as contributory to the larger provision of service; indeed, not all staff and supervisors recognised the value of doing research at all in practice.

#### **9.6.4 Service User Involvement**

The involvement of service users in all aspects of quality improvement efforts, including research, is increasingly being urged by patient advocates and policymakers alike. The Westpark Initiative addressed stakeholder concerns at the very beginning of designing their intervention in 2009, and occasional individuals served on panels regarding key initiatives in 2012. Whilst some input is better than none, my finding from the focus group patients was that they regarded their perspective as being relatively invisible. It is a limitation of the intervention that more patients were not involved. Patients could have been included at all stages, as the quality improvement strategies evolved. Furthermore, it may be a limitation that I did not include a patient representative as a research advisor, which may have influenced the design of the tools used in this study. Authors Morrow, Ross, Grocott and Bennett (2010) have suggested incorporating service users in the context of research and the quality of such partnerships can be assessed with a Quality Involvement Questionnaire. Adding routine to embedding service user perspectives within integration and service delivery research has yet to have been explored fully.

#### **9.7 Insights of an Ethnographer**

There is always a question of how involved the observer is in the milieu of the research context. As an experienced practitioner myself, I came to the setting with a foreknowledge of the ethos of healthcare. Ethnographic field notes contributed to

making sense of the qualitative data collected; my observations of the application of the boundary spanning concept in the healthcare field allowed me specifically to explore how the concept had been operationalised as part of the quality improvement interventions. Entering the field and professional conduct in the field are not straightforward for any researcher, and will often vary by setting and researcher attributes. The researcher is entering a social reality, and as such will need to build acceptance and trust as a part of developing access to a field. At times, trust and intent may be questioned by participants, and this was the case in the present study. At the very first event I observed, the facilitator of the Westpark Initiative, Chris, asked me to introduce myself to the group; he continued to ask me to introduce myself at every event I attended. It was clear from the beginning that my initial intent to quietly observe from the margins was not possible in this setting, and indeed as an ethnographer this was an early lesson. I introduced myself as a researcher and as a doctoral student trying to understand boundary spanning, but I learned early on to add that I was a nurse and primary care clinician. Explaining that I was interested in how patient care was actually improved by staff seemed to invite participants to come to me. If I said I was a nurse, nurses would find me on a break. If I said I was a student, staff considering a degree would seek me out to ask me about my experience. If I said I was a primary care clinician, GPs would seek me out to ask about my work. In my field notes, I reflected upon how my role was being perceived, and how that may have contributed to (or bias) data I was collecting. For recruiting purposes, I was glad to be sought out by any potential participants, and used all opportune introductions to explain my research and to gather another perspective of the event. However, though I wanted to build rapport, and demonstrate a knowledgeable holistic perspective, when a participant asked me whom I had spoken to, I often worked to stay on the fine line between demonstrating transparent procedure without disclosing specific participant identity.

How to be positioned “close-to” without being an undue influence on the observed context was a reflexive challenge for me. In 1984, Burgess discussed different stances of the researcher doing field research. The stance of participant-as-observer is where the researcher participates in the context, forms relationships with those being studied, and makes no secret of their task in observing the group (Waddington, 2004). For example, there may be concerns that subjects will act differently based on the assumption that they are being observed. However, subjects who believe that the researcher is sympathetic are more likely to reveal authentic and consistent behaviour over time if there is a trusting relationship. Two participants began to call me to offer advice about what meetings I should attend for research purposes, and others would introduce me to staff they thought I should interview to improve the perspective of the study. Observations over longer time periods allow for the researcher to notice progressive changes, particularly if they identify with the group being studied (Waddington, 2004). The advantages of participant observation are more balanced during studies with longevity, as was offset in this setting across 34 months of observations.

Being a researcher in context for such a long period presented additional challenges. I was interviewing people during a tense re-organisation, and heard about numerous concerns between workers and their line managers. Personality issues, management challenges, and even hearing that someone might be leaving the organisation would occur during interviews or informal conversations during event breaks. Issues of gaining access and maintaining contact, while not violating an individual's privacy or the organisation's management including related ethical issues, are discussed in many texts about participant observation. Such ethical dilemmas and research discontinuities can be a major limitation of participant observation as a method. As my familiarity with participants and current events increased, I relied on the protocols to remind me to respect ethical boundaries. For example, using the semi-structured interview guide helped me to stay in the stance of questioner, even when the participant was tempted



to ask what I knew. “Tell be more about that...” became as ubiquitous phrase in my repertoire.

I was able to build and maintain rapport with the participants in this study, at times blurring the boundary between participant observer and colleague. In this way, it is not surprising when additional questions may be raised about the level of interaction a researcher has with the study participants. The researcher's position has a dual role: in an embedded sense in the field for subject matter intimacy, yet as an outside observer for scientific inquiry. The level of involvement and dialectical dance between these roles indeed hinges on the theoretical framework of the study, and the fine line (or boundary per se) between the methods of action research and ethnography (Huzzard, Ahlberg, & Ekman, 2010). For the present study I was interested in the processes supporting boundary spanning, which included asking about leadership styles and methods. After a year of data collection, I was contacted by three different participants asking for my feedback on their own participation in the project and their own leadership. All commented that my research inquiries had prompted them to reflect about their own roles, and they had found the interviews had provided a mirror into their own activities. They asked me to provide feedback to them, in a coaching stance, to help them further develop their own participation in quality improvement at work. Two asked for peer evaluations for their work file. I found such requests to be professionally flattering, but struggled to keep my role as researcher in the foreground. During interviews, the ethnographic researcher, far from taking a positivistic stance, should practice reflexivity, to allow for interconnections between the researcher and subjects to develop and be interpreted at all stages of the research, including writing and dissemination (Heyl, 2011). I struggled as a researcher to span, appropriately, the boundaries presented by such interconnections. It was also clear that these requests represented the line for me as a researcher between conducting action research and ethnography – that I was not taking an active role in the desired changes, and that I was an ethnographer. Upon further reflection, and in dialogue with my research team, I

offered the participants the transcripts of their interviews with me, for their own records, but did not provide formal evaluation for them, though I discussed my rationale with each of these participants.

Interestingly, after 34 months in the setting, I began to serve the role of historian. While observing as a researcher, I was always writing in my field notebooks. I had a consistent black notebook, two pens, one black and one multi-coloured. Very often participants had asked me what I was writing, and I would show them my notes, and the effort of my research to understand boundary spanning. As time passed, committees I observed would make decisions, participants I interviewed would describe events, and stakeholders would express responses to the presentations. As an obvious on-site recorder, I became recognised as a memory keeper. In a number of instances, I was asked to report what had happened at a certain point in time. One of the early organisational researchers who looked at boundary spanning, Michael Tushman, himself discussed the exploratory method of field study and the risks of becoming too involved with research participants even when it is important to have flexibility and familiarity for insight to develop and for the creation of new hypotheses (Tushman, 1974). In the study of organisations, the frame of mind of 'sensemaking' posits that a set of heuristics (not algorithms) will be applied to the interpretation of observations. Conceptualising organisations as social structures allows for the "intersubjectivity" of mutually reinforcing interpretations" by the members of the collective group and the researcher (Weick, 1995, p.170). In this manner, I saw requests for confirming historical events in the 'cultural' memory as an opportunity to address both construct and internal validity. In reviewing my own notes, at those times I experienced a real tension in risking having my memory and my assumptions called out as incorrect. As a researcher, I was very aware of my dual role dancing between a (supposedly) objective non-participant and (potentially overly) embedded participant. These were great opportunities to seek convergence of the evidence (Yin, 2009). I

could report what I had noted, others could voice agreement (or disagreement), and together we could piece together the sense of the experience.

Indeed, this was the most interesting and enjoyable part of being an ethnographer – to see that I had appreciated an experience, as if through the eyes of my subject. Van Maanen (2011) talks about “scribes and tribes” living together during ethnographic fieldwork (p.2), and the importance of “being there...in the messy, in-the-same world” (p.12). The relative world is a muddled place in which to attempt to find order. At times being an ethnographer felt to me like swimming in a seaweed-filled brackish inlet, with occasional bursts of clear fresh water. I would palpably notice connections happening at an event, or during an interview, a participant would have a sudden burst of insight that would make boundary spanning seem like a completely clarified process. Then in struggling to describe the concept, the search for the right words would further cloud understanding. As Van Maanen said,

“Fieldwork is a technique of gathering research material by subjecting the self-body belief, personality, emotions, cognitions – to a set of contingencies that play on others such that over time – usually a long time – one can more or less see, hear, feel, and come to understand the kinds of responses others display (and withhold) in particular social situations.” (2011, p.151).

With the people I studied sitting next to me, looking over my shoulder at my notes, and listening to my presentations, reflexivity seemed to be earned as much as it was practiced. In his epilogue to this book about writing ethnography, Van Maanen (2011) relates: “the presentational burden of ethnography has become heavier, messier, and less easily located in time and space, and innovations in tale telling are on the rise” (p. 161). There are likely many ways to continue to relate what I have witnessed for new audiences. The challenge in describing reliably what I have learned, and what indeed others could understand about boundary spanning remains, as indeed “analysis never ends” (Van Maanen, 2011, p.153). As I return to the role of clinician, I am thankful for the on-going lessons about the culture of healthcare, and realise that I will always be observing with the inquisitive eyes of an ethnographer.

## **CHAPTER 10 Conclusions**

### **10.1 Summary of the Main Findings**

The purpose of the present study was to examine how boundary spanning activities function in healthcare settings to provide for improved patient care across professions, organisations and sectors. I believe that the SECI model was particularly useful for analysing the barriers that boundary spanners reach across, allowing me to observe, to identify, and potentially anticipate, barriers and enablers, particularly within the interfaces. Two research questions were posed.

#### **Research Question 1:**

Does boundary spanning activity lead to knowledge exchange, and if so, what facilitates, or impedes, the sharing of knowledge across boundaries?

Boundary spanning does appear to lead to knowledge exchange, though context is a crucial factor, especially at the micro and meso levels. There are many barriers and enablers, as discussed above in Section 7.3.3 and listed in Figure 10. Though structured learning programmes are often how professional disciplines teach updated practice, there are also informal methods through which professionals learn about the work of other disciplines, in exchanges which can be both tacit and explicit. Boundary spanning can also happen at the organisational and sectoral levels, when representatives of different groups come together, particularly to generate and apply new solutions within a local area. As the lens of SECI helped clarify, socialisation and externalisation as forms of dialogue are just the beginning of the knowledge exchange process. Through the processes of combination and internalisation, dynamic efforts that can be developed into reflective routines may have a greater chance of lasting impact. While charismatic leadership, thought leaders, and empowering experiences particularly occur during the socialisation and combination stages, supervisors and managers who act as gate-keepers can enable, or block, boundary spanning initiatives at stages when adding flexible structure is crucial.

#### **Research Question 2:**

Does knowledge exchange lead to vertical and horizontal integration, and if so, how do boundary spanning activities contribute to improvements in the quality of patient care, particularly to provide more seamless services?

Knowledge exchange does appear to lead to integration, particularly at the meso and macro levels for vertical integration. Vertical integration requires political, policy-based, and financial structures to be spanned by individuals and organisations that can ‘think out of the box’. Increased awareness of different types of solutions is crucial for the kind of boundary spanning units, which may be needed or created at the interfaces between a diverse set of services. Again, knowledge exchange must move beyond socialisation to generate the bridging efforts that can withstand external pressures. Horizontal integration is enabled when socialisation and facilitated dialogue through externalisation activities are in place. Multidisciplinary and cross-sectoral learning events can prompt planning events for designing activities, which may accomplish horizontal integration, but repeated cycles of regular inquiry are important to drive such efforts toward systemised solutions.

In general, boundary spanning processes can lead to knowledge exchange, which can lead to integration of services, but on-going continuity of services which improve the quality of patient care is strongly related to issues of scalability. Individuals can serve to bridge services and increase the personal experience of more seamless services, but building structure into how this happens on a larger scale is a greater challenge.

## **10.2 Implications for Boundary Spanning in Healthcare**

Leaders in healthcare systems and local health organisations are consistently challenged with ways to improve the seamlessness of care for their clients. Being able to adapt lessons to local needs and facilitate connections between different sectors is crucial. This research identified a number of limitations at many intersections. The need for potential solutions remains, and the case studies also helped reveal success factors (see Table 17 below).

**Table 17 Barriers and Potential Boundary Spanning Solutions**

Limitation / Barrier	Potential Solution Identified
<b>[DEMENTIA]</b> Missed opportunities to improve connections between disciplines and well informed patients happened when <b>meeting agendas were too controlled</b> and <b>infrastructure was too policy-bound</b> .	<b>[MENTAL HEALTH]</b> Setting <b>focused objectives</b> and facilitating <b>staff-designed data collection</b> were more responsive measures of local variation and <b>tailored improvements</b> .
<b>[MENTAL HEALTH]</b> <b>Knowledge exchange was blocked by practice managers and supervisors</b> who note population level measures, but do not recognize successful access to right care at the right time.	<b>[DIABETES]</b> Persistently facilitated multi-disciplinary meetings but also require <b>building local champions and supportive networks</b> . Developing leaders with insight <b>needs to be a mentored process</b> .
<b>[DIABETES]</b> <b>Perceived power differentials</b> and <b>entrenched accountability concerns</b> blocked effective problem solving.	<b>[MENTAL HEALTH]</b> Educational events motivate engagement but professional confidence and trust are built with persistent <b>professional exchanges</b>

At the micro level, mentoring of service leaders is important and must be on-going. Including research activity, and attention to responsive data collection methods, needs continuous reflective effort on the part of staff and their supervisors. Often, practitioners and staff lack confidence in tailored data collection but desire appropriate measures of care quality. Patient level outcomes can be identified and measured in accordance to local need – remembering that qualitative/narrative data can also be informative. Supervisors who recognise the need to learn continuously from their efforts as a service team can empower staff to provide service while also improving service. Working together to define “effective” and “seamless” services can help align productivity measures with high quality care. In this manner, attention to collecting the most effective forms of data needs to be mentored and non-punitive, to catalyse critical and iterative quality improvement efforts. Similarly, practice managers have an important role as gate-keepers to general practice surgeries – they can block new ideas or serve to invite adaptive thinking, as to how information flows through the practice. Including supervisors and practice managers in understanding how data

collection methods can contribute to service improvement can contribute to continuous quality improvement that is locally meaningful. Significant professional development requires guided reflection – diaries can increase self-awareness in staff serving in many different professional roles. Often ‘research’ is seen as being too academic, lengthy, or time consuming. Inspiring multidisciplinary teams to design and co-produce their own measures is an important part of incorporating continuous improvement into daily practice. In these ways, staff and practitioners can be motivated to participate in designing routine measures that recognise both professional effectiveness and the integration of services.

At the meso level, cross-sector introductions must be facilitated, and continuous. Professional roles can change, but it is more likely that individuals at the sectoral level will change positions and location even as the disciplinary roles remain the same in various organisations. Improving introductions and information-sharing between different healthcare professionals and sectors needs to be arranged on an on-going basis so that professionals (and patients and carers) know who and how to access needed services in the primary, secondary, and tertiary areas. Such multi-disciplinary interactions, as professional socialisation, can prompt enthusiasm for improving connections between services. However, it is not enough to arrange meetings – facilitated dialogue must be guided towards reflection about process, designing of flexible boundary spanning activities, and systemising efforts that are adaptive and effective.

At the macro level, systemised processes and policies can contribute to lasting impact, but must not be viewed as fixed steps. Imposed top-down nationally-led policies, and even funded educational formats can indirectly cause effective local programmes to lose traction, particularly when funding incentivises “new” ways of introducing change. A continuous movement through internalised learning should include on-going

reflection of what aspects of large programmes 'fit' local needs, and empowering adaptation to the needs of local health communities.

These findings confirm the analysis of researchers in the NHS, who examined strategic change in the 1980s and suggested that cooperative interorganisational networks working with clear goals might accomplish needed changes in health services, particularly from the perspective of effective managers and leaders (Pettigrew, Ferlie & McKee, 1992). These findings also confirm lessons from previous research about quality collaboratives. The challenges include choosing the right subject for teamwork, ensuring participants define objectives and clarify expectations. Ensuring that teams are empowered and experience mutual learning means that they are enabled to collect appropriate data, reach measurable targets, and plan for sustainability and spread of improvements (Øvretveit, Bate, Cleary, Cretin, Gustafson, et al., 2002). The data from the present study and the rich material from the four cases confirm that cross-boundary relationships at the micro level contribute greatly to the potential success of teams working in locally defined and led quality improvement efforts.

Primary care is considered the first point of access to a healthcare organisation for patients seeking medical services. As a sector, primary care is more likely to be organised as a more complex, non-hierarchical structure than acute care and it can be seen as a collection of loose networks. Due to the complex nature of primary care, one qualitative study found that information overload was a particular concern for information sharing, and a lack of collaboration across the sector limited service innovation (Fitzgerald, Ferlie & Hawkins, 2003). Interestingly, that research confirmed the findings in the present study, that opinion leaders can influence change, by acting as either facilitators or inhibitors of change and innovation (Fitzgerald, Ferlie & Hawkins, 2003). As the widest scope of healthcare, primary care is often provided by family practitioners (in the US) or general practitioners (in the UK), and increasingly by nurses trained to postgraduate levels in both countries. The provision of primary care



has much to do with access to services, removing barriers to better care, and integrating services at many levels and from many types of practitioners. Improving the quality of healthcare then also implies the necessity of increasing access and improving the integration of services. Recent policy developments in the NHS have placed fundholding and commissioning by general practice in more central role (Department of Health, 2010). Seamless referrals between services are just one aspect of a dynamic system. By definition, a referral is the process of moving a patient across the primary-secondary care interface to receive key specialist medical services. Referring patients across the primary-secondary care interface to receive key specialist medical services has not been found to be a whole solution to optimizing patient care (Akbari, Mayhew, Al-Alawi, Grimshaw, Winkens, et al., 2009). Research efforts in primary care have attempted to understand how to optimise patient care, particularly in the area of referrals between general practitioners and specialists. Policy makers in the UK, and insurers in the US have argued that control over the referral process is linked to control of healthcare costs, thus making referrals an important topic of study especially in a time of reform. Furthermore, patients and clinicians often have the perception that their own control of which healthcare provider they can see next for their ailment is linked to their quality of healthcare. In this way, referrals become a ticket across boundaries – permission to move forward in a trajectory, and a way of controlling (limiting) access to additional, and likely specialised, services. The Department of Health white paper ‘Equity and Excellence’ (2010) strategises that “patients will have choice of any provider” (p. 3, p.16). The present study did not clarify how patient choice contributes to higher quality of care and lower costs, nor is it known what the role of referrals is in helping patients navigate their way through complex healthcare systems. However, in each of the present case studies there were discussions about how to create new methods for improving appropriate referral rates, and it is likely that topic will continue to figure in future instrument design for studies focused on crossing boundaries.

Evaluations of integration in the field of long-term conditions have confirmed similar findings to the present study, for example, that individuals and teams who support cross-boundary working require specialist knowledge, and particularly need flexibility in how services are delivered. In two studies by the same team, it was found that progress toward integration in social care was found to be slow, and great variability of integration attempts in the English primary care setting was documented, as competing organisational and financial priorities hindered implementation (Bernard, Aspinall, Gridley & Parker, 2008, 2010). Examples of potential good practice in social care have been recently identified in the provision of support for people with complex needs. Key features include reliable well-coordinated delivery, flexibility in how services are organised, and commissioning which includes crossing boundaries (Gridley, Brooks & Glendinning, 2012). Placing 'link workers' in individual boundary spanning positions, particularly nurses, social workers or case managers is not a new solution. Such liaison roles have been studied in many settings including those discussed in my literature review in Chapter 2 (Dey, Roaf, Collins, Shaw, Steele, et al., 2002; French 2005; Hunter, Playle, Sanchez, Cahill & McGowan, 2008). The intervention of placing mental health link workers has been examined as a complex strategy for shared care for sustained integration. In this study, it was found that developing computer systems was not as effective as facilitated interventions that allowed link workers to respond to crisis with flexible responses based on professional experience (Byng, Norman, Redfern, Jones, 2008). Although a similar boundary spanning intervention of placing a nurse with advanced training in a link worker position was implemented in the diabetes and dementia case studies that I examined, it is my assessment that more systemised efforts are necessary to achieve the desired impacts from such solutions. As people live longer, and pressures to provide continuity of care across many decades burdens health service delivery, more precise success factors will need to be implemented, beyond placing individuals at interfaces, and related measures of impact beyond case studies will need to be validated. In a rapid systematic review, evaluation studies of integrated models of care for people with long-term neurological conditions, it was

found that clinical outcomes were only reported in fifteen of 49 included studies (Parker, Bernard, Gridley, Aspinall, F., & Light, K. 2010). Connecting the effect of integration to patient care outcomes continues to be an aspirational goal of researchers.

Recent research has examined the implementation of change in healthcare Communities of Practice (CoP) and found that boundary issues can be problematic, particularly across intra- and inter-organisational boundaries in primary care. Researchers suggest that having a developmental perspective of these CoPs can offer a pragmatic approach to facilitating service improvement with a view of multiple, overlapping CoPs as a part of a larger landscape. In this way, manipulating the emergence of interconnected communities may be unsustainable, whereas efforts to encourage boundaries that are more permeable may meet with more intentional success (Kislov, Walshe & Harvey, 2012). Nonaka's middle-up-down management model dovetails with these findings (1988; 1994). In the present cases, the team leaders sat at the strategic junction between vertical and horizontal flows of information. With a middle-up-down management model, there is less need for charismatic leadership, top-down, or bottom-up models, and more dynamic creation and sharing of knowledge is enabled (Nonaka, 1994). The four team leaders in the four case studies examined here, each struggled to accomplish the role of leading 'from the middle' with varying degrees of success. Despite the theory that compelling leadership might not be necessary, Chris was viewed by many to indeed be a charismatic leader in the WI. There is still more empirical research needed which can precisely identify how to routinely implement management methods which embody this practice.

### **10.3 Leading Knowledge Creation and Exchange Across Boundaries**

Nonaka and colleagues have been writing about SECI as a model of knowledge creation since 1994, and suggest that leaders play a role in facilitating how knowledge assets are developed and redefined, by moderating the conversion process, supplying

energy, and invoking judgments of quality (Nonaka, 1994; Nonaka, Byosiene, Borucki & Konno, 1994; Nonaka, Umemoto & Senoo, 1996; Nonaka, Toyama & Konno, 2000; Nonaka & Toyama, 2003; Von Krogh, Nonaka & Aben, 2001; Von Krogh, Nonaka & Voelpel, 2006). More recently, Von Krogh, Nonaka and Rechsteiner (2012) have provided suggestions for key activities or processes to support knowledge creation and exchange across boundaries. They argue that the following activities need to take place at three 'layers' that span formal and informal organisations:

- core activity (the informal layer where knowledge is being created and exchanged through direct contact and collaboration between individuals)
  - look for common interests
  - emphasise and promote higher goals
  - mobilise and coordinate assets to convince participants of likely success
  - fix meetings and initiate discussions on priority issues
  - capture outcomes
- conditional (connecting the knowledge creation and exchange processes with the overlying formal structures)
  - form teams at right time and draw on existing links between participants
  - build non-hierarchical peer groups
  - provide experiential assets and routines
  - judge suitability of existing assets
  - connect outcomes of knowledge exchange to vision
  - connect and integrate people formally and informally\*
  - provide and steer flow of assets (e.g. IT systems and datasets)\*
  - set incentives to engage in knowledge creation and exchange\*
- structural (formal and structured processes)
  - formulate a knowledge vision that ties existing knowledge to new areas where knowledge should be sought\*
  - formulate, decide on and help implement communication systems, rules, and procedures\*
  - balance goals for knowledge creation and exchange with economic efficiency\*
  - co-ordinate access to knowledge assets across organisations and systems\*

The later activities, marked with an asterisk in the list above, are seen by Von Krogh et al. as relating to 'a formal position, process, or activity controlled by some central authority', whereas the earlier activities in the list emerge from 'cooperation between individuals that manifests itself in their shared direction, the alignment of their behaviour, and their mutual commitment to a particular practice' (Von Krogh, Nonaka & Rechsteiner, 2012, p.29). Many of these activities at the core activity layer, as

described earlier, were observed in my fieldwork. However, with the significant exception of the anxiety & depression in BME populations case, there is evidence described in Chapter 6, that the WI alone lacked many, if not all, of the structural layer (and some of the conditional layer) activities listed above. In contrast, in the anxiety & depression in BME populations case, such structural activities were largely provided by the CLAHRC. In summary, although moderate to high levels of core activity in the WI initially appeared promising, knowledge creation and exchange appeared to be hampered by relatively low conditional and structural activities.

#### **10.4 Implications - Methods for the Study of Integration**

When looking at the spiral of movement through the SECI model more happens than activity in four simple stages, as described by the vignettes and case descriptions above. Leaders can play a role in each of the four stages of SECI, and research methods may need to be specifically aligned to capture information at the intersections. Based on my experience in the field, and with the variety of tools used in this study, different research activities are needed to capture the boundary spanning processes happening as individuals, departments, and organisations move through the SECI spiral. As knowledge moves from tacit to explicit, quantitative methods such as knowledge assessments, time studies, surveys, and ranking scales may have particular value. In examining the movement of tacit knowledge into experience and practice, qualitative research designs such as semi-structured interviews, focus groups and diaries may add a richer level of detail. Together a range of tools can be used to examine the movement of knowledge, and the generation of *ba* over time. Figure 17 shows the “classic” interpretation of the SECI model, whereas in Figure 18 the potential research activities are shown in the steps in-between.

Figure 17 SECI Model – Spiral of Movement

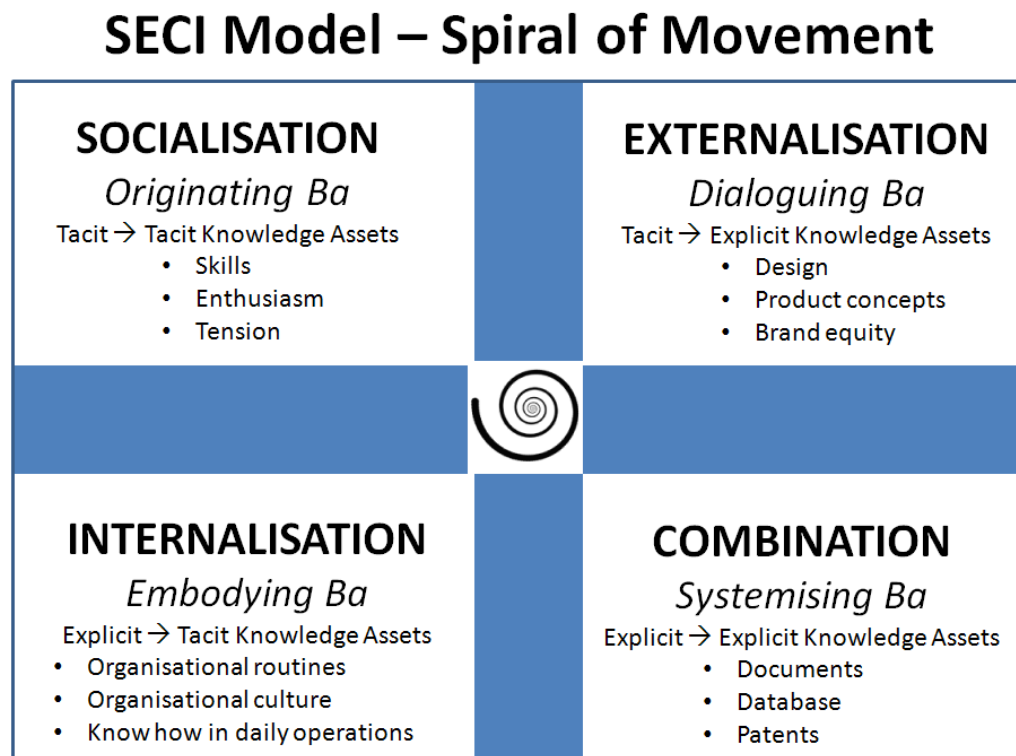
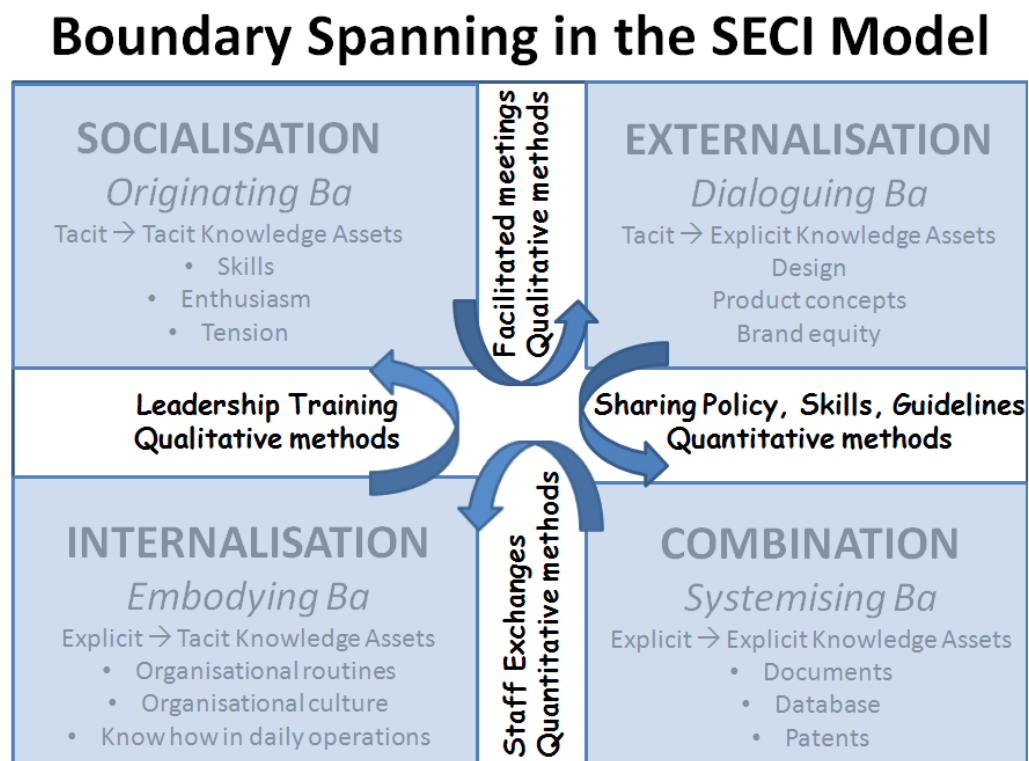


Figure 18 SEC Model and Boundary Spanning between stages



In these ways, more study will be needed to examine how professionals and organisational programmes develop across the interfaces between the four SECI

stages. It appears that quantitative methods may suit the investigation of the systemising efforts in the combination stage, with more easily measurable aspects of literal products and explicit results. Qualitative measures are likely to be useful to describe the dynamic aspects of *ba* during which empowering ideas and innovative solutions may develop. A combination will best suit examination of comprehensive services.

### **10.5 Contributions to Knowledge**

As an examination of boundary spanning activities, the present study is an important contribution to understanding how gaps in services can be closed, which conditions may increase knowledge exchange, and which processes can contribute to increased integration. This is the first application of the SECI model as an examination in any healthcare setting. As a theorist, Nonaka and his colleagues (2012) have themselves recently begun to explore the activities between the four stages – effectively trying to understand boundary spanning, as described in Section 10.3 above. This present study contributes to the development of the SECI theory, its application to healthcare research, and the practical development of clinically based solutions in whole learning systems. The rich descriptions provided in the four case studies, including their trial and error experiences of trying to implement real improvements in a healthcare system in true flux, describe the micro level processes, which accompany change. This study, with its four case studies nested in a practical application of the boundary spanning concept, had the advantage of well-timed position in a changing context with high policy relevance at the time. Flexibility and adaptability are required in healthcare system change, and the present study provides vivid examples of the processes, which contribute to quality improvement efforts.

### **10.6 Implications for Policy, Practice and Research**

Boundary spanning activity can provide opportunities for knowledge exchange, which in turn can lead to integration – but there are important variations in context which

enable the kind of local innovations which contribute to lasting connections between professions, organisations and sectors. Developing policy that helps individuals and organisations to bridge service gaps should be based on goals where well-informed individuals are enabled to design, and provide high quality care. Quality in healthcare services has been defined with many different dimensions and reflecting a variety of professional traditions, though often including dimensions of patient safety, effectiveness, and social equity (Boaden, Harvey, Moxham, Proudlove, 2008). In the contemporary, challenging, economic climate there is an even greater imperative for healthcare systems to find ways to improve both the efficiency and quality of service provision. A recent review has highlighted that quality improvement can in some cases lead to lower costs (Øvretveit, 2009) and, as Crump & Adli (2009) have pointed out, the work of key pioneers of quality (like Deming, Juran, and Kano) has shown the scope for improving quality and reducing cost in many sectors. Although there may be a link between quality and outcomes, it can be argued that these are different aspects of healthcare, which are difficult to capture on typical scorecards. Outcomes measures, performance indicators, and other metrics will always be a part of the manner in which policy-makers, managers, and researchers attempt to capture a picture of healthcare provision, but it is still a selection of crude tools (Boaden, et al. 2008). Longitudinal outcome assessments, which gather data from wide cross-sections of stakeholders, continue to have an important place in quality improvement studies based in complicated systems (Øvretveit & Gustafson, 2002). As part of the on-going policy debate about how best to enable cross-boundary working there is increasing interest in the NHS in designing patient pathways coupled with routine monitoring of patient flow, satisfaction and clinical outcomes as a recipe for cost-effective and high quality health service. Ideally, research in this complex field needs the most realistic and dynamic measures, responsive to changes in science and descriptive of the experiences of a variety of stakeholders, including providers and patients.



Whole system – or comprehensive - integration aimed at reducing healthcare costs and bringing care closer to home requires that vertical and horizontal integration develop in tune with each other (Thomas, 2006b; Thomas, Meads, Moustafa, Nazareth, Stange et al, 2008). For practitioners, learning how to generate solutions to improve continuity between local services should be an intentional aspect of continuous professional learning. Learning on the job, and reflection in action, should include finding ways to improve healthcare as a system, as individuals practice within complicated organisations of all sizes (Argyris, 1999; Argyris & Schon, 1978;1996). Inter-professional education which includes experiential lessons and modeling in collaboration during quality improvement will be important in nursing, medicine and other disciplines (Irby, Cooke & O'Brien, 2010; Norman, 2005). Multi-level conceptualisations of inter-disciplinary collaboration which evolves in holistic practice settings are beginning to appear in the literature (Bedwell, Wildman, DiazGranados, Salazar, Kramer & Salas, 2011; Salas, Cooke, & Rosen, 2008) Extending this learning in clinical experiences will teach future healthcare practitioners, managers, and leaders to span boundaries, recognise and implement innovative solutions, and provide truly continuous services in all settings.

Reflective practices, which include embedded data collection within organisational routine - going beyond regular audits to include inquiries including mixed research methods- appear to play a role in longitudinal success, though more study is suggested. Facilitating professional communities engaged in such learning (as opposed to those being directed or led) is complicated, but crucial (Bate & Robert, 2002a; Folsom Group, 2012; Jackson & Bluteau, 2007). Research engaged in understanding the processes of continuous learning can enhance the context sensitivity of studies, but may challenge traditional evaluation research paradigms (Bate & Robert, 2002b). In particular, understanding how to improve the connections and process of knowledge sharing between practice-based and academia-based professionals, can help to implement further the type of learning that needs to happen

for quality improvements to be realised. Including patients in the redesign of services (beyond satisfaction surveys) may also have value (Bate & Robert, 2006).

Researchers will need to clarify methods for measuring the impact of boundary spanning activities, particularly in ways that are linked to the processes of service delivery. In this way, it will take a range of tools to describe, examine, and measure the outcomes of multi-disciplinary, multi-level interventions that span complex interfaces in healthcare. A combination of routine measures (both qualitative and quantitative), which can be locally adapted, could be crucial for improving the explicit understanding of how to implement integrating solutions, especially when joining-up services in the out-of-hospital and cross-sectoral settings. Each setting will need to tailor such measures to their own local context. Incorporating and normalising this level of research embedded in daily practice will be important (Thomas, Graffy, Wallace & Kirby, 2006; Thomas, Griffiths, Kaie & O'Dwyer, 2001). There remains a distinct need to further the empiric study of how integration contributes directly to improving patient outcomes and the quality of care – and the processes that are generalisable. More research applications which allow for further critique of the SECI model is needed generally - and the deeper applications of the concept of *ba* particularly - so that the framework can be translated into ideas more accessible to healthcare managers, administrators and commissioners, and leaders. The model has been useful in other industries, particularly information technology, and it can be further applied for a dynamic understanding of healthcare settings. The present study highlighted the weakness of the model as a procedural guide, and its inability to prompt or even examine for patient outcomes.

Boundaries are liminal spaces, which are often experienced as times of uncertainty and difficult, if not potentially confusing interactions. Boundary crossings are also where the potential for innovative ideas can surface, and solutions take form. Innovation at the practice level requires knowledge sharing which is dynamic and

responsive to local context. As a key to understanding how knowledge moves in and through organisations, it will continue to be important to study exactly how problematic boundaries are negotiated, and including research that examines interactions at the individual, group, and organisational levels will be key. A variety of research designs can accomplish this task and will be necessary in combination, but a move beyond purely descriptive studies of the roles and activities of individual 'boundary spanners' is warranted. The present study confirmed what was found in the literature synthesis, that socialising with excellent communication and interpersonal skills is not sufficient for producing changed behaviour, shared knowledge, or improved patient care. Systemising processes for creating flexible routines that continually adapt to local needs are an important aspect of creating both horizontal and vertical integration. Studies are now needed which can directly connect educational and managerial efforts to implement quality improvement efforts that have direct and measurable impacts on patient care outcomes. More so, building dynamic connections between practitioners and academics with a multi-disciplinary scope will continue to be crucial as healthcare systems reorganise to face future challenges.

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## **APPENDICES**

### **Appendix A Refereed Dissemination**

**POSTER.** Nasir, L., Thomas, P., Robert, G., Norman, I., & Fischer, M. (16-19 April 2013) Enabling multidisciplinary teams to span organisational boundaries for the improvement of patient care. Poster presented at *International Forum on Quality & Safety in Healthcare* in London, England.

**PRESENTATION.** Thomas, P., Stange, K., Nasir, L.C. (2 December 2012) Local Health Communities and Health Networks for Integrated Care. Forum Presentation at *North American Primary Care Research Group (NAPCRAG) 40<sup>th</sup> Annual Meeting* in New Orleans, United States.

**PRESENTATION.** Nasir, L., Robert, G., Fischer, M., Norman, I. (24 October 2012) Spanning boundaries between primary and social care: examining knowledge exchange and the impact of integration efforts on healthcare quality. *The International Society for Quality in Health Care (ISQua) 29th International Conference* in Geneva, Switzerland.

**POSTER.** Evans, L., Sharma, K., Nasir, L., Green, S., Marinho, F., Thomas, P. (3-5 October 2012) Do Mental Health Link Workers improve BME referrals from GP's to Talking Therapy Services? Poster presented at the *Annual Primary Care Conference of the Royal Collage of General Practitioners (RCGP)* in Glasgow, Scotland.

**POSTER.** Evans, L., Nasir, L., Green, S., Sharma, K., Marinho, F., Bell, D., Thomas, P. (3-5 October 2012) Improving patient and project outcomes using inter-organisational innovation, collaboration and co-design. Poster presented at the *Annual Primary Care Conference of the Royal Collage of General Practitioners (RCGP)* in Glasgow, Scotland. \*Rosette earned in poster competition.

**PRESENTATION.** Nasir, L.C., Robert, G., Thomas, P., Fischer, M., Norman, I. (3 October 2012) Learning from Integration: Embedding Inter-organisational Research in Primary Care. Paper presented at the *Society for Academic Primary Care (SAPC) 41st Annual Conference* in Glasgow, Scotland.

**PRESENTATION.** Nasir, L.C. (3 October 2012) Boundary Spanning for Inter-organisational Learning for Integrated Care – The Case of Local Health Communities. Paper presented at the *Society for Academic Primary Care (SAPC) 41st Annual Conference* in Glasgow, Scotland.

**PRESENTATION.** Nasir, L.C., Robert, G., Thomas, P., Norman, I. J., and Fischer, M. D. (25 May 2012) Studying a 'boundary spanning' intervention to improve the quality of health care using mixed methods and an embedded clinician-researcher; reflections on the relative value of different tools and approaches to inform policy making. Presentation at: *Qualitative Research for Policy Making (QRPM) 3<sup>rd</sup> Annual Conference* in Lisbon, Portugal.

**PRESENTATION.** Nasir, L.C. (11 April 2011) An Examination of Boundary Spanning in Health Care Settings. Presentation at the *9th Annual Meeting of the Quality Improvement Research Network (QIRN)*. Hosted by Karolinska Institute & EMGO Institute for Health and Care Research, in Amsterdam, The Netherlands.

**Appendix B Literature review table: summary details of empirical studies of boundary spanning in the healthcare sector (n=38)**

CITATION	AIM/OBJECTIVE (codable)	HEALTHCARE SETTING and SAMPLE (coding) COUNTRY	DESIGN / DATA COLLECTION METHOD (codable)	KEY FINDINGS (codable)	LIMITATIONS (codable)	INTERFACE BOUNDARY (classifying)
						INTEGRATION
Abbott, S. (2007) Leadership across boundaries: A qualitative study of nurse consultant role in English primary care.	To elicit stakeholders' views of establishment and early progress of new NC nurse consultant posts and lessons learnt	Nurse Consultants (NCs) in 1 Primary Care org.  UK	Qualitative. 4 Case studies. 17 Semi struct 19 stakeholder interviews	NCs are well placed to be BSs, delivering change across org but negotiating priorities and relationships are time-consuming tasks, and NCs may have to work with a restricted # of partners initially	Role study carried out before roles delineated. Can not generalise from only one organisation Small sample size.	Professional     Vertical
Allen, D. (2009) From boundary concept to boundary object: The practice & politics of care pathway development.	Study the history and development of patient safety care pathway	Mental Health inpatient – case of a care pathway  UK NHS	Qualitative. Case study	A care pathway methodology is a boundary concept its looseness and imprecision makes it highly effective in aligning management, clinical and user interests around healthcare quality agenda. Value in variation to tailor as needed.	Patterns of compromise described in one case - but no clear process defined.	Professional Organisation    Horizontal
Alexander, Wells, Jiang, Pollack (2008) Organizational determinants of boundary spanning activity in outpatient substance abuse treatment programmes.	Sought to identify director, client, unit and market factors associated with active director boundary spanning. Used regression models to test associations between predictors and 5 aspects of directors' self- reported boundary spanning.	Outpatient Substance Abuse organisations 1995; 1999- 2000; 2005 surveys.    Michigan USA	Quantitative. National Survey data. Regression Models. Director's Self- reported boundary spanning	Directors licensed as Substance Abuse treatment counsellors spent more time consulting with treatment providers & presenting in comm. Older directors spent less time consulting, making committee presentations, liaising with monitoring orgs. The few associations between client unemployment & director BS were positive; the 2 associations between the % of clients who were African-American and boundary spanning were negative. Private ownership, being based in larger orgs were negatively associated with types of BS. Perceived competition for public support was positive associations with all BS measures. Directors of treatment organisations may improve treatment practices & political leverage by	External funding and social stigma are contextual issues that remain difficult to address. Specific setting. Old data.	Sectoral       Horizontal





[illegible]

Currie, G., Finn, R., & Martin, G. (2008) Accounting for the 'dark side' of new organizational forms: The case of healthcare professionals.	HRM literature review of management of change associated with new organisational forums focus on work and employment relations. Examines the implementation of network forms of genetics healthcare delivery that cross organisational boundaries.	Human relations  UK NHS	Qualitative. Longitudinal comparative Case Study Design. 11 In-depth cases of 27 mainstreaming genetics programme from DoH..	There were management outcomes. Less powerful prof groups may find difficulty in enacting Boundary spanning roles associated with RWS with new org forms. Due to (1) inconsistency of government policy, which fragments orgs & (2) prof institutions sustain professional hierarchy & power differentials. The model that genetics clinicians and genetic counsellors pursue is one of an outreach, rather than more integrated mainstream service. Questions whether a 'network' at all.	Trust and power not explored. Authors believe it is generalisable to other public sector settings, but not clear if testable hypotheses. No clinical outcomes.	Professional Organisation  Vertical
Currie, G., & Suhomlinova, O. (2006) The impact of institutional forces upon knowledge sharing in the UK NHS: The triumph of professional power and the inconsistency of policy.	Study examines perceptions of docs, health prof, gen managers and professors, all focused on healthcare & medical practice within academic health centre. Regulationss & roles designating BS roles.	Academic Health Centre Teaching Hospital. 1 CEO. 15 Medical GI Consultants: Vascular surg. 13 Professrs. Interviews & Observations of GastroEnt Group COP  N. England UK	Qualitative. Interviews. Observations. Reviewed documents. Sociological Investigation. Interviews in 2 phases. N=29.	There were management outcomes. Empirical findings structured around 3main themes that highlight effect of institutional forces in engendering segment, organisational & disciplinary boundaries and, thus, inhibiting knowledge sharing: 1.healthcare & higher education boundary 2. hospital & primary care boundary 3. Docs& other pros boundary.  Experts may "hoard" knowledge. Government policy seems to enforce boundaries that impede knowledge sharing.	No clinical outcomes.	Professional Sectoral Organisation  Vertical

Drach-Zahavy, A. (2011) Interorganizational teams as boundary spanners: The role of team diversity, boundedness, and extrateam links.	(1) Identify BS activities interorganisational teams engage with. (2) how to organize interorg team in ways that promote effectiveness. (3) Test model of interorg team effectiveness. Model depicts BS activity as key process variable characterizing interorg teams. Integrated Model & study juxtaposed 3 struct variables: team informational diversity, team boundedness, & extra-team links assessed by sum of contractual short-lived connections with external professional/ agents/orgs during previous year	49 health promotion teams. Interorganisa tional health promotion rep — community	Qualitative + Quantitative. Interviews with team coordinators. Survey Data of team effectiveness. Regression analysis for predicting boundary spanning activities.	Our findings indicated that three types of Boundary Spanning— scouting, ambassadorial, and coordinating—were positively associated with interorg team effectiveness. For team informational diversity, team boundedness, and extra-team links, scouting and ambassadorial activities fully mediated relationships with team effectiveness. For team boundedness, coordinating activity also fully mediated relationship with team effectiveness. Findings highlight the importance of incorporating structural considerations into management of interorganisational teams.	Managing team's external environment ignored. including possible tradeoff relationship between team's external & internal activity. Study was cross-sectional so cautious about causal interpretations of relationships found between structures, process & output variables. To validate relationships need more longitudinal design.	Sectoral Organisation
Ehrich, K., Williams, C., Scott, R., Sandall, J., & Farsides, B. (2006) Social welfare, genetic welfare? boundary-work in the IVF/PGD clinic.	Explores how staff working in PGD perform ethical boundary-work in reflexive relations of accountability between the public & private spheres, and between medicine, citizen, and state	Teaching Hosp. Assisted conception unit. Nursing, admin, obgyn radiography, embryology, molecular, cytogenetics	Qualitative. Observation clinics. 1 site. 16 staff Interviews- range of disciplines. Facilitated ethics discuss groups.	Examined: . Boundaries located conceptually as shifts between 'social welfare' & 'genetic welfare'. Perception of doctors, other health profs, gen mgrs, professors. Staff reveal tensions in their views that the welfare of the child assessment can be seen as intrusive and discriminatory and on the other hand that medical intervention in reproduction should be socially and professional accountable. Rather than being viewed as discrete these two orientations should be seen as indicating an emergent direction along a continuum.	'Intervention implies accountability' has ethical meaning but is difficult to generalise to other settings.  No patient outcomes. No patient voice.	Horizontal  Professional  Vertical

Etz, R. S., Cohen, D. J., Woolf, S. H., Holtrop, J. S., Ches, K. E. D., Isaacson, N. F., Olson, A. L. (2008) Bridging primary care practices and communities to promote healthy behaviors.	Health behaviour change interventions in 8 practice based research networks were examined. 2 years of data collection with comparative analysis to understand strategies used for linking primary care practice with community resources.	8 Practice based research networks in Primary Care. 2005-2007.  USA	Qualitative. Key informant interviews. Researcher Diary – online biweekly Interpretive Methods.	Linkages were facilitated by boundary spanning strategies that compensated for the lack of infrastructure between practices and resources and by brokering strategies that identified interested community partners and aided mutually beneficial connections with them. Viewed perceptions of professionals in clinical setting.	Patient outcomes not measured. Patient perspective not studied.  No clinical outcomes.	Sectoral   Horizontal
Fennell, M. L., & Alexander, J. A. (1987) Organizational boundary spanning in institutionalized environments.	Using institutional framework, tested hypothesis of different BS strategies between freestanding & member organisations in multi-org systems. Compared effects of both org characteristics & environmental variables using hospital nationwide sample data	901 Hospitals  Hospitals bridging to other hospital systems  USA	Quantitative. Data Analysis. HAES data. [Hospital Administrative Environment and Structure survey]	Results show that membership in a system increases the likelihood of hospitals using bridging strategies. Further, organisational complexity in boundary spanning mirrors complexity in an institutional environment in a complex, not simply isomorphic manner.	Very old study.	Organisation   Horizontal
Ferlie, E., Fitzgerald, L., Wood, M., & Hawkins, C. (2005) The nonspread of innovations: The mediating role of professionals.	Trace innovations: 4 innovations in hospitals: LMWH heparin following elective ortho surgery. Primary care innovations: Aspirin after MI, HRT, DM treatment, physio employment.	8 comp longitudinal case studies of selected innovations – 2 acute care. Replicated in primary care. 1996 & 1999. 232 interviews.  UK	Qualitative. Cross case sum tables. Purposeful selection micro-case study. Interpretive methods. Field-based interviews. Thematic analysis.	Interprofessional, intraprofessional, managerial and multi-disciplinary groups examined. Boundaries between professional groups at micro level of practice slow spread of innovation. Social & cognitive boundaries between different professional retard spread, as individual professionals operate within uni-disciplinary Community of Practice (COP). Positive outlier: use of aspirin adoption spread widely. Macro institutions reinforce identity of micro groups. Professional roles are prescribed sectorally. Professional communities stimulate learning & change internally but block such processes externally. Considerable social distance between members of co-located COPs.	No patient outcomes. Deviant case didn't fit.  Difficult to replicate.  No clinical outcomes.	Professional   Vertical

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Leifer, R., & Huber, G. P. (1977) Relations among perceived environmental uncertainty, organization structure, and boundary-spanning behavior.	Three hypotheses examining relations between PEU, organisation structure, and boundary-spanning activity investigated. H1: organicness of structure will be positively associated with PEU. H2: Organicness will be positively associated with frequency of BS activity. H3. Frequency of BS activity will be positively associated with PEU. Lowest two echelons of a rather tall, midwestern state government agency concerned with family problems, adoption, social work etc.	12 work units. 182 people working in health & welfare org, Semi-autonomous work groups included clerical, managerial, and caseworker personnel.  USA	Quantitative. Questionnaire of organic structures by mail. Cross-sectional field study.	Used a tool for measures of boundary spanning activities. Positive relations found between all three variables. Partial relations indicated that PEU does not influence the relationship of boundary spanning to structure but structure reduces the relationship of PEU to boundary spanning to zero, and BS reduces the relationship between structure and PEU to zero. Thus, not only is the notion of BS as an intervening variable supported, but results suggest that causality in the relationship between structure and PEU may be from structure to PEU rather than current contingency notions of PEU affecting structure.	Only pertained to lowest levels of fairly hierarchical and large institution.  No clinical outcomes.  Very old study.	Sectoral Organisation         Horizontal
MacIntosh-Murray, A., & Choo, C. W. (2005) Information behavior in the context of improving patient safety..	How do health care providers and mgrs make sense of patient safety risks and adverse events. Article discusses four key functions of the information/change agent (i.e., boundary spanner, information seeker, knowledge translator, and change champion) in the context of situated practice and learning.	Acute. 26 Staff on 40-bed geriatric/gen med unit  Ontario Canada	Qualitative. Ethnographic case study of med unit in lg tertiary care hosp. Interviews. Observation. Document Review. Grounded theory Coding.	Found that front-line staff are task driven, coping with heavy workloads that limit attention to & recognition of potential info needs & knowledge gaps. A surrogate in info related role "information/ change agent" — may intervene successfully with staff & engage in preventive maintenance & repair of routines. All 4 functions are important for facilitating changes to practice, routines, & work environ to improve patient safety. 6 themes are tension/ dilemmas underlying info-related functions.	Use of metaphors to label phenomena. Assumption that workers may not be competent at critical thinking or information skills - yet little analysis of adverse events. No clinical outcomes.	Professional         Horizontal

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		UK NHS		boundaries, and quickly developing a working knowledge of particular pressures facing disparate prof groups. Result Key themes: (1) Engaging stakeholders; (2) Establishing new roles; (3) Securing a post pilot future.		Vertical
McDonald, R., Campbell, S., & Lester, H. (2009) Practice nurses and the effects of the new general practitioner contract in the English national health service: The extension of a professional project?	This paper reports the impact on nursing working in primary health care settings of changes to the GP contract in England implemented in 2004.	20 female practice nurses in 20 primary care practice  UK	Qualitative. 20 Interviews. Themes constantly contrasted Glaser & Strauss grounded theory.	Intraprofessional examined. Practice nurse work is changing to reflect a more medical (and masculine) - orientation to service delivery. Nursing work is described as routine and template driven, which may limit claims to 'professional' status. The reaction of some practice nurses to HCA encroaching on what was previously practice nurse territory suggests a policing of boundaries rather than an inclusive approach to colleagues within the nursing team.	Assumptions of impact of gender on roles and notions of professionalism limits the overall view. Very small sample. All female all nursing sample. No management or clinical outcomes.	Professional  Horizontal
Merrell, J. (2000) Ambiguity: Exploring the complexity of roles and boundaries when working with volunteers in well woman clinics.	The concept of ambiguity is used to illuminate the complexity of roles and boundaries when working with volunteers. Feminist Principles.	Unpaid & paid volunteers in community well woman clinics. Purposive sampling.  UK NHS	Qualitative. Ethnographic. 18 months Participant Observations 26 Interviews. Thematic content analysis.	Volunteers within formal organisations are likely to experience role ambiguity. Need to develop strategies for managing ambiguity - perhaps appoint a linking coordinator.	Strategies for managing ambiguity were not studied. Confirmed description of concept - limited usefulness. No management or clinical outcomes.	Professional  Horizontal

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Rugkasa, J., Shortt, N. K., & Boydell, L. (2007) The right tool for the task: Boundary spanners in a partnership approach to tackle fuel poverty in rural Northern Ireland.	Fuel poverty as pub health issue in HAZ Health Action Zone. Explores range of local partnership interventions & process of "spanning downwards." Project tackled fuel poverty through twin process making properties more energy efficient, increasing household income, encouraging higher uptake of SS benefits. Com devel approach in HAZ	27 members of community associations. 12 interviews with partners including reps from all sectors  N Ireland.	Qualitative. 4 Focus groups. Individual interviews - people from different organisations. Visits to project areas	There were management outcomes. Fuller understanding of the success or failure of local partnership interventions can be gained by also exploring the process of spanning "downwards". Community-led always portrayed as a positive dimension.	no replicable measures though apparently satisfaction and '100% uptake of energy efficiency measures' was reported. Not clinical sitting.	Professional Sectoral Organisation  Horizontal
Salhani, D., & Coulter, I. (2009) The politics of interprofessional working and the struggle for professional autonomy in nursing.	Politics and paradoxes involved in realising nursing professional project - forms of collaboration that result. Attempts to understand micro-political struggles and paradoxes.	Single inter-professional team over 12 months on one hospital unit : nurse, assistant, psychiatrist, resident, Social Worker etc.  Canada	Ethnographic study. 48 Interviews. Intensive observation.	Interprofessional and intraprofessional examined. Nurses gained substantial autonomy from medical domination and secured practical dominion over the work of non-medical professionals. New forms of inter-professional collaboration were accomplished through both simultaneous and sequential micro-political struggles with psychiatrists and non-medical professionals and the formation of political alliances and informal agreements. Nursing solidarity at the elite level and substantial effort by the elite nurses and committed colleagues to mobilise their less enthused members were fundamental to their success. There are politics and paradoxes involved in realizing nursing's professional project and the forms of collaboration that result.	Clouded by assumptions that 'state-sanctioned managerialism' reduces org admin & clinical power of the medical profession, causing professionals to retreat to safety of own professional interests. Setting limited to acute psychiatric unit - not generalisable. No management or clinical outcomes.	Professional  Horizontal

Stern, R., & Green, J. (2005) Boundary workers and the management of frustration: A case study of two health city partnerships.	Explored implications of apparent contradictions of power imbalance and potential disillusionment within partners. Provides rationales for continuing for boundary people working at unstable interface.	2 Healthy City projects Public Health  S. Africa UK.	Qualitative. Case study approach - not comparative. Ethnographic. In depth interviews. Participant obs. Document analysis.	There were management outcomes. Findings suggest that partners dealt with tensions first by assuming a discrete identity as 'entity of boundary people'. Individuals participating as partners assumed a distinct role of 'boundary people' at interface between authorities & communities, as part of new partnership 'entity', and as an entity, they were keen to bridge gaps between different perspectives and to find common ground.	Juxtaposition instead of comparison but yet attempt to generalise. Two very different settings. No clinical outcomes.	Professional Sectoral          Horizontal
Thompson, M. A., Diccion, S., Hensick, J., & Armstrong, S. (1996) Spanning organizational boundaries to improve care and service: Inpatient & outpatient chronic peritoneal dialysis.	An evaluation of key indicators conducted to determine quality of PD svcs as chronic dialysis clients were admitted to 1 UMHS inpt unit .The challenge of matching chronic PD pt's needs with appropriate level of care along healthcare continuum was addressed.	Academic tertiary care healthcare system. Nursing. Dialysis. Inpt & Ambulatory  USA	Quantitative. Retrospective chart audit - 30 patients cared for under old and new guidelines compared.	Presents an effective way to use quality data to improve PD care practices and patient outcomes.	Old study. Very context specific.	Professional       Vertical
Walker, R., Smith, P., & Adam, J. (2009) Making partnerships work: Issues of risk, trust and control for managers and service providers.	How do actors within primary health & community support system create & maintain relationships of trust between individual & orgs.	Managers and service providers participating as members of Primary Care Provider PCP committees, CEOs, managers, working party members.  Australia	Qualitative + Quantitative. Questionnaire with f/u 63 interviews. Coded thematically.	Uses Trust Eval Scale: Smart Trust Matrix of Covey & Merrill to reports differences in experience of risk & uncertainty, trust & control, & managers & service providers working as BS through committees of a PCP (voluntary alliance of primary care svc agencies within LGA. Social model of health within state jurisdiction). There were management outcomes. Managers had significant risk and uncertainties, and trust and control were important. Opposite case for service providers.	Context specific. No clinical outcomes	Professional Organisation       Horizontal

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### Appendix C Meta-Ethnographic Synthesis

INTEGRATION (classifying)	INTERFACE BOUNDARY (classifying)	2rd ORDER INTERPRETATION Reciprocal Translation ( <i>LCN synthesis</i> ) (codable)	3rd ORDER INTERPRETATION <i>LCN synthesis</i> (codable)	THEMES (codable)	MEMO SECI & LCN notes (codable)	CITATIONS
Vertical	Professional	BS as change agent when in new role. Negotiating relationships is necessary but time consuming. Communication skills – communicating role and scope is necessary. Expert knowledge increases credibility. Unclear role definition restricts activity. Skill in building relationships is needed.	Expert knowledge increases credibility. Unclear role definition restricts activity. Boundary spanning role requires relationship building skills.	(1)adaptability/ flexibility is required at the boundary (2)interpersonal/ communication skills are crucial (3)role identity is built on skill competency	SECI: this is S-E. As a weak role definition study, assumptions = conclusions. Socialisation leads to 'brand' identity.	Abbott (2007) Leadership across boundaries: A qualitative study of the nurse consultant role in English primary care.
Vertical	Professional Organisation Sectoral	Editors were more open to medical Public Information Officers (PIOs) as boundary spanners, whereas surgeons preferred to handle their own media relations. Rank and expertise tension - who should spread information - Good communicator vs. expert clinician?	Expertise in specific context is legitimacy. Healthcare expertise ranks higher than communication expertise. Higher rank will boundary span less.	(2)interpersonal/ communication skills are crucial (3)role identity is built on skill competency (4)empowered voice relies on link of trust (5)position of power sets level of diplomacy needed	SECI: this is I-S. Communicators need to make sense of S for an organisation.	Ankney & Curtin (2002) Delineating (and delimiting) the boundary spanning role of the medical public information officer.
Vertical	Professional Organisation	BS person can be in middle which can be entrapment, a stressed position - especially when power asymmetry. Size controls revenue and has status. Medical expertise has status. BS response is behavioural and emotional -anger if stress. Conflict. Personal Status. High status impacts handling of conflict – emotional response is anger. Higher status requires less collaboration. Professional competency provides	Professional competency and expertise provides hierarchical power. BS position in middle is stressful especially when power asymmetry. Higher status requires less collaboration. Expertise is power. Higher status requires less BS. Low Status BS experiences	(1)adaptability/ flexibility is required at the boundary (2)interpersonal/ communication skills are crucial (5)position of power sets level of diplomacy needed	SECI: this is C-I.	Callister & Wall (2001) Conflict across organizational boundaries: Managed care organizations versus health care providers.



		hierarchical power.	stress. Professional competency provides hierarchical power. Status impacts handling conflict.			
Vertical	Professional	Uncertainty about course of care can alter communication, alter openness. Professional cultural value affects interpretation of science, blocks new ideas from outside group. There is covert tension about different 'cultural' understanding. The Heart Failure Nurses were perceived as having the time and required 'listening and communication skills' - which resonates with role in this setting, and remit. In practice, referrals for specialist palliative care involved covert and overt difficulties, based on structure of local service and links to specialist times, as well as distribution of funding. Rather than being immutable, disciplinary boundaries are negotiated differently in cases of shared care, and contingent on personal commitment and local organisational goals within teams.	Perceived uncertainty requires more boundary spanning. Covert tension about different 'cultural' understanding represented by different professional role. Relationship between policy and practice is mediated by negotiation of disciplinary values (culture) within a local context.	(1)adaptability/ flexibility is required at the boundary (2)interpersonal/ communication skills are crucial	SECI - this is S. Tension in socialisation.	Chattoo & Atkin (2009) Extending specialist palliative care to people with heart failure: Semantic, historical and practical limitations to policy guidelines.
Vertical	Professional Organisation Sectoral	Politics are significant in influence on knowledge sharing across sector, organizational and professional boundaries – which is mediated by attending to human and social aspects of context. For those working at boundary spanners between sectors, such as the GPwSI or outreach workers from specialist centres, the difference between the focus of specialisation and the broader interests of the wider healthcare system were starkly apparent. Those whose remit involved the delivery of a specific service often questioned how far such a minor	*Power asymmetry has an impact. * Issues of jurisdiction inhibit knowledge sharing. *Human and social aspects need attention for policy to succeed.	(1)adaptability/ flexibility is required at the boundary (3)role identity is built on skill competency (5)position of power sets level of diplomacy needed	SECI: this is E-C. Leadership is not a panacea. Structural change has limited effect on knowledge sharing. Issues of jurisdiction inhibit knowledge sharing.	Currie, Finn & Martin (2007) Spanning boundaries in pursuit of effective knowledge sharing within networks in the NHS.

		component should go - those in genetics project complained others don't get it. Result was reluctant to engage in knowledge sharing around genetics knowledge. GPs needed a clear reason to give up their time for training. Individual leadership appears important. Authors suggest organisational development for facilitating shared perspective.				
Vertical.	Professional Organisation	Less powerful professional groups may find difficulty in enacting BS roles associated with new org forms. Clinicians at apex of org pyramid and are able to resist manager interventions. New role needs to fight to gain recognition (fear of autonomy in self, unclear who manages). Relationships set limits. Outreach competes with integration. Government policy fragments organisations. Professional institutions sustain professional hierarchy and power differentials.	*New boundary role needs to fight to gain recognition (fear of autonomy in self), unclear who manages.*Relationships set limits. *Outreach model competes with integration. Uncertainty increases tension at boundary.	(3)role identity is built on skill competency(5)position of power sets level of diplomacy needed	SECI: this is S-E	Currie, Finn & Martin (2008) Accounting for the 'dark side' of new organizational forms: The case of healthcare professionals.
Vertical	Professional Organisation Sectoral	Government policy seems to enforce boundaries that impede knowledge sharing. Power differentials exist and may require shift from old to new template. Experts may "hoard" knowledge. Hospital MD as one way conduit. Hospital doctors - knowledge sharing with peers within hospital boundary. Downplayed GP or commissioning managers might make to service development. Pecking order amongst hospital doctors. Able to shape knowledge sharing that took place in a self-interested way. One way flow. Old boundaries hard to overcome with new institutional template. Institutional isomorphic processes facilitate	Higher status knowledge shares down, not up. Experts may "hoard" knowledge. Institutional isomorphic processes facilitate convergence within groups of organisations and occupations subject to same institutional pressures, but inhibit convergence across different organisational and occupational groups.	(3)role identity is built on skill competency (5)position of power sets level of diplomacy needed	SECI: this is I-S. Routine knowledge is being blocked at the return to socialisation.	Currie & Suhomlinova (2006) The impact of institutional forces upon knowledge sharing in the UK NHS: The triumph of professional power and the inconsistency of policy.

		convergence within groups of organisations and occupations subject to same institutional pressures, but by the same token inhibit convergence across different org and occupational grouping.				
Vertical	Professional	Consideration of welfare of child involves staff in ethical boundary-work across the two orientations and between the accountabilities and responsibilities of healthcare professionals, individuals and the state. Theme of professional responsibility and accountability for intervention was noted in staff views and experiences of fulfilling the welfare of the child assessment required by the current regulatory act. Also theme of discrimination and intrusion, and social accountability.	Perceived accountability, as represented by professional discipline (aka expertise) can create tension and uncertainty at boundary. Regulatory expectations contribute to perceived tension.	(2)interpersonal/ communication skills are crucial (3)role identity is built on skill competency (5)position of power sets level of diplomacy needed	SECI: this is S. Some movement into E as far as counselling role requires. Perceived accountability is important to consider. Staff pick and choose how to implement policy, requires gentle diplomacy.	Ehrich et al. (2006) Social welfare, genetic welfare? Boundary-work in the IVF/PGD clinic.
Vertical	Professional	Professional communities of practice (COPs) develop internal learning and change but block external. Different cultural value affects interpretation of science. Study confirms nonlinear flow of innovation without prescribed sequence of stages, is erratic, circular or abrupt. Cross case comparison identified different cognitive frameworks brought by professional groupings as knowledge boundaries. Individual professionals within so-called multidisciplinary teams often found it difficult to agree to the role redefinitions indicated by evidence based practice. Uniprofessional COPs can be seen as micro layer within professions. COPS are highly institutionalised.	Strong disciplinary boundaries slow spread of innovation. Institutional structure (and hierarchy) can inhibit change. Flow of innovation (and knowledge?) is non-linear. Lack of sharing of disciplinary knowledge inhibits innovation.	(1)adaptability/ flexibility is required at the boundary (2)interpersonal/ communication skills are crucial (3)role identity is built on skill competency (5)position of power sets level of diplomacy needed	SECI: this is S. Need flexible boundaries at S-E level	Ferlie et al. (2005) The nonspread of innovations: The mediating role of professionals.

		Professional roles are prescribed sectorally, shaping the identity of individual professionals. Different research traditions and conceptions of what constituted knowledge and evidence were apparent - traditionally subordinated professions and segments different than elite profession of medicine. Authors suggest boundary objects such as joint protocols might help.				
Vertical	Professional Organisation	Clinical specialists as BS acting as organizational boundary spanners require skills in the informal cultural work of organizing, facilitating, and maintaining links across professional, team and organisational boundaries. Need wider skills than information management and negotiating organizational complexity. Respondents attempted to influence medical staff through: independent action, involvement in teaching and direct challenge. Participants also reported more covert strategies to influence care patterns, such as: subterfuge and adaptation. However relationships between docs & nurses were not necessarily conflict oriented. Discourse around daily working conditions also described close and informal teamwork. Nurses looked to medical colleagues for support in attempting research-based change. Second biggest group to influence discussion about research uptake was other nurses. Clinical Nurse Specialists are not in hierarchical relationships and their ability to implement policy decision is limited by lack of fiscal or managerial responsibility for care - strategies to	Facilitating skills are needed. Position of power will determine bridging strategies used. If no authority overt strategies of communication are used. Research uptake is influenced by colleagues in hierarchical order. Expertise is legitimacy. Boundary spanner role as knowledge broker. Institutionally assigned accountability does not imply effective communication.	(1)adaptability/flexibility is required at the boundary (2)interpersonal/communication skills are crucial (3)role identity is built on skill competency (4)empowered voice relies on link of trust (5)position of power sets level of diplomacy needed	SECI- this is S-E at the professional level and E-I at the organisational level	French (2005) Contextual factors influencing research use in nursing.

		manage economic constraints were: influencing, adapting, trading equipment.				
Vertical	Professional	Specific skills are needed to foster communication. Common communication functions included: liaison, feedback-remediation provider, counselling and support provider, system monitor, troubleshooter, investigator and group facilitator. As a feedback-remediation provider and troubleshooter, advocate not only connects the patient population to relevant organisational personnel but also takes and recommends actions to improve the quality of care through both behavioural and system changes.	BS can be information and change agent in role of advocate.	(2)interpersonal/ communication skills are crucial (4)empowered voice relies on link of trust	SECI - this is S-E	Martin & Tipton (2007) Patient advocacy in the USA: Key communication role functions.
Vertical	Professional	Claims to knowledge of geneticists and GPSIs interacted with wider policy pressures to produce a rather more conservative redistribution of power and responsibility across the intra-professional boundary than the rhetoric of modernisation might suggest. GPSIs defined their legitimacy relationally and wished to extend their expertise 'upwards' into the realm of clinical genetics, with a view to practice. Geneticists were less keen on this idea. Power differential. Specialists with individualist mentality. Knowledge as competency as legitimacy as power.	Expertise is Legitimacy is power	(3)role identity is built on skill competency (5)position of power sets level of diplomacy needed	This is S-E. Negotiating a role. If power in role is related to speciality expertise, then what does that have to do with integration- fewer mainstream collaborations? More speciality expertise, less need to communicate (common finding with these authors).	Martin, Currie & Finn (2009) Reconfiguring or reproducing intra-professional boundaries? Specialist expertise, generalist knowledge and the 'modernisation' of the medical workforce.

Vertical	Professional Organisation Sectoral	<p>To set up boundary spanning services. Established relationships and 'social capital' were of central importance not only in fostering collaborations that led to the initiation of pilots, but also in gaining trust and 'buy-in' from parties beyond pilot staff whose cooperation was essential to making services work. In many cases, this required well established relationships – or extensive work on developing these – across organizational and sector boundaries, and quickly developing a working knowledge of the particular pressures facing disparate professional groups. Least difficulty encountered by expanding roles of existing personnel than recruiting new staff - could attract applicants but not suitable candidates so needed to redefine job descriptions for "hybrid" roles. GPs with interest found it difficult to get involved due to day to day work. Sensibility to priorities of other groups was instrumental in achieving wider organisational and behavioural change (key levers varied).</p>	<p>BS role is key to establishing connections for trust and cooperation.</p> <ul style="list-style-type: none"> <li>*GP as obstacle.</li> <li>*Diplomacy is key.</li> <li>*Facilitation is important.</li> </ul>	<p>(1)adaptability/ flexibility is required at the boundary (2)interpersonal/ communication skills are crucial (4)empowered voice relies on link of trust</p>	<p>SECI: This is E. S-E stage is important to gain trust while communicating across boundaries.</p>	<p>Martin, Finn &amp; Currie (2007) National evaluation of NHS genetics service investments: Emerging issues from the cancer genetics pilots.</p>
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Vertical	Professional	<p>Interdisciplinary discussions also brought to light the fact that the process of effective peritoneal dialysis (PD) evaluated by the reduction of fluid volume, was measured in different ways by different disciplines. A cause-and-effect diagram was completed and revealed the complexity of the existing communication process required to care for the inpatient PD patient.</p> <p>Multidisciplinary communication clarified this incongruity and prompted the evaluation of patients for orthostatic hypotension as part of standard unit nursing practice. The results of the changes were measured by planned, specific quality measures. Facilitated interdisciplinary discussions uncovered previously unseen problems and solutions. Outcomes measured by chart audit.</p>	Boundary spanning processes can be newly developed guidelines that are iteratively developed and evaluated. Effective boundary spanning relies on understanding what each partner/discipline does.	(1)adaptability/ flexibility is required at the boundary (2)interpersonal/ communication skills are crucial (3)role identity is built on skill competency	SECI: this is E-C and C-I. Understanding what have been implicit activities, then articulating explicit knowledge and systemising it into a document.	Thompson et al. (1996) Spanning organizational boundaries to improve care and service: Inpatient and outpatient chronic peritoneal dialysis.
<b>INTEGRATION (classifying)</b>	<b>INTERFACE BOUNDARY (classifying)</b>	<b>2rd ORDER INTERPRETATION Reciprocal Translation (<i>LCN synthesis</i>) (codable)</b>	<b>3rd ORDER INTERPRETATION <i>LCN synthesis</i> (codable)</b>	<b>THEMES (codable)</b>	<b>MEMO SECI &amp; LCN notes (codable)</b>	<b>CITATIONS</b>
Horizontal	Professional Organisation	<p>Care pathway is a boundary object and quality improvement tool in multidisciplinary care management. Complex process by users of tool required deciding appropriate levels of abstraction and specificity....to be transferable need to strip off universal meaning but to be usable needs to adapt to specific context. This case was an ingenious compromise. Dual role of device was to coordinate and account, which provides it a power to prompt action. Tension/conflict at points of uncertainty.</p>	Boundary object, like boundary spanner, serves as liaison in tense and uncertain areas.	(1)adaptability/ flexibility is required at the boundary (2)interpersonal/ communication skills are crucial (5)position of power sets level of diplomacy needed	SECI: this is C-I.	Allen (2009) From boundary concept to boundary object: The practice and politics of care pathway development.

Horizontal	Sectoral	Level and type of boundary spanning activity in substance abuse treatment programmes is independently associated with characteristics of the programme director, programme client population, organisation and market. Private ownership and being based in larger organizations were negatively associated with some types of boundary spanning. Perceived competition for public support was positively associated with all measures of boundary spanning.	Boundary spanning is a response to the context, not just personality trait. Larger organisation required less boundary spanning. Competition spurred more boundary spanning.	(1)adaptability/ flexibility is required at the boundary (2)interpersonal/ communication skills are crucial (5)position of power sets level of diplomacy needed	SECI: this is I-S. Contradicts assumptions about collaboration. Contradicts Thompson (1967) in that boundary spanning units develop in response to larger organisation.	Alexander, et al. (2008) Organizational Determinants of boundary spanning activity in outpatient substance abuse treatment programmes.
Horizontal	Professional Sectoral	Informative BS interactions increase trust and satisfaction. Through on-going interaction between staff members and board members, sets an example for each other by how they behave in meetings and implies that boundary spanning functions are learned. It is unlikely that a board as a unit ever reaches a point where agency routines are fully known as procedures, situations, and board members change frequently. The extent to which a board member feels he knows how the agency faces issues also correlates with the extent to which he believe she accurately identified the real problem in an issue confronting the board. Staff member influences both what a board member does and how he perceives board functioning.	Informative BS interactions increase trust and satisfaction. Access to information is key to level of involvement.	(2)interpersonal/ communication skills are crucial (4)empowered voice relies on link of trust	SECI: this is S-E. C-I is important to effectiveness. How is trust composed - is it the same as knowledge?	Clark (1978) Spanning the boundary between agency and community: A study of health planning staff and board interaction.
Horizontal	Organisation Sectoral	Effective interorganisational teams should maintain an open team configuration by inviting external experts, changing team composition over time, including full-time and part-time members alike, and	To successfully manage the mission of boundary spanning activities interorganisational teams should maintain an open	(1)adaptability/ flexibility is required at the boundary (2)interpersonal/ communication	SECI - this is S-E. Need flexibility. Need adaptability. Need training.	Drach-Zahavy (2011) Interorganizational teams as boundary



		<p>distinguishing core and peripheral members. Boundary spanning activity promotes the effectiveness of interorganizational teams: to the extent that the effectiveness of teams engaged in scouting, ambassador, and coordinating behaviours increased. Findings highlight the importance of incorporating structural considerations in to the management of interorganisational teams.</p>	<p>team configuration. Increased scouting and ambassadorial activity, and greater effectiveness of the interorganizational team, were associated with greater informational diversity. The best contribution to boundary spanning activity and effectiveness that was made by occasional collaboration with a range of experts during the team's project as needed. Antecedents vital for enhancing BS activity: low boundedness, high informational diversity, frequent creation of extrateam links. Loose boundaries increase boundary spanning. Access to diverse information is key to effective boundary spanning. Frequent extrateam contact is key to effective boundary spanning.</p>	<p>skills are crucial</p>	<p>Need access to outside experts and knowledge.</p>	<p>spanners: The role of team diversity, boundedness, and extrateam links.</p>
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Horizontal	Sectoral	Boundary spanning strategies compensated for lack of infrastructure between practices and resources, and by brokering strategies. Linkages in form of 3 community resources: pre-identified resource options, referral guides and people external to practice who offered support and connection to resources. Linkages were stronger when they incorporated practice or resource abilities to motivate the patient, such as brief counselling or post-referral outreach. Data suggested that sustaining linkages requires continuous attention and on-going communication between practices and resources.	Communication increases responsiveness when design is tailored to needs. Continuous communication sustains links. Links are stronger with better communication. Outreach as form of integration.	(1)adaptability/flexibility is required at the boundary (2)interpersonal/communication skills are crucial (4)empowered voice relies on link of trust	SECI: this is E-C. Strategies become documents.	Etz et al. (2008) Bridging primary care practices and communities to promote healthy behaviors.
Horizontal	Organisation	Organisational complexity in boundary spanning mirrors complexity in institutional environment. Membership in a system increases the likelihood of hospitals using bridging strategies - probably as a result of corporate policies intended to centralise functions and minimise costs. Boundary spanning units appear to grow as institutional environment becomes more complex. Boundary spanning refers to boundary redefinition, buffering to protect organisation against disturbing environmental influences, or bridging to connect organisations to other organisations. Increased regulatory stringency is associated with lower administrative ratio and a smaller proportion of clinical services provided by external sources.	More stringent regulation and institutional structure leads to less boundary spanning. Less openness at boundary means fewer clinical options.	(1)adaptability/flexibility is required at the boundary (5)position of power sets level of diplomacy needed	SECI - this is I. C moves to I as a result of increasing size and complexity of organizations. (Confirms Thompson, 1967).	Fennell & Alexander (1987) Organizational boundary spanning in institutionalized environments.

Horizontal	Professional Organisation	Need for flexibility, created by workload demands, limited staffing and the need to meet targets has the effect of creating transient teams. Rapid changes in team membership inhibit the formation of knowledge and also fracture existing shared knowledge about teamwork as non-members are introduced into the 'expert' team.	Expertise is legitimacy. Flexibility may compete with efficiency in actual context of team. Competency is important. Flexibility/Adaptability are important. Constant novelty inhibits sustainable knowledge	(1)adaptability/ flexibility is required at the boundary (3)role identity is built on skill competency	SECI: this is I. The need for routine in I is limited by too much S. Here, flexibility is a constraint for expertise	Finn & Waring (2006) Organizational barriers to architectural knowledge and teamwork in operating theatres.
Horizontal	Sectoral	Link between courts and mental health providers. Wanted better "handoff". Discussion of Range of Options: model. Expanding the role of providers to serve as boundary spanners between courts and the components of local mental health systems. Main barriers to better service integration included a lack of health insurance for target population, which limits treatment options, the stigma of being involved with the criminal justice system and how it limits access to programmes, poor communication between agencies, and restrictive eligibility criteria.	Expertise is legitimacy. Competency is needed to establish links in handoff. Knowledge of other disciplines is required for interagency coordination.	(2)interpersonal/ communication skills are crucial (3)role identity is built on skill competency	SECI: this is E-C at the organisational level - communicating what one sector does to another.	Grudzinskas et al. (2005) Integrating the criminal justice system into mental health service delivery: The Worcester diversion experience.
Horizontal	Professional	The most common type of activity performed by members of APN-1 was "Knowledge sharing" followed by "solicitation". Regarding the types of knowledge shared, the most common where "Institutional practice" and "personal opinion". The factors that have helped sustain knowledge sharing within the online community of practice include: a self-selection; validation of one's practice with others who share a similar working situation: a need to gain better understanding of current knowledge and	Shared learning increases awareness increases professional validation. Book knowledge was evident in sharing, the sharing of "cultural knowledge" was not explicit. Increased willingness to share in a non-competitive environment.	(2)interpersonal/ communication skills are crucial (3)role identity is built on skill competency (4)empowered voice relies on link of trust	SECI: this is S. Socialisation happened in movement from S-E, as some 'brand' identity was communicated in the group (see Nonaka in article footnote).	Hara & Hew (2007) Knowledge-sharing in an online community of health-care professionals.

		best practices in the field; a non-competitive environment; the asynchronous nature of the online communication medium; and the role of the listserv moderator. Sharing knowledge is an important activity in BS learning spaces.				
Horizontal	Sectoral	Tensions arise between goals of collaboration and needs of broader constituencies. Conversations create collaboration – needs interest, identify, coherence, joint contribution. More powerful partners may engage in coercion. Ideas from outside collaboration may held at bay. Do not eradicate competing tensions but sustain to benefit conversation. Confusion in understanding what various parties considered the legitimacy of the Council. The examination of interorganisational collaboration has often dismissed power and conflict as having a purely negative effect: conflict is said to distort communication, while the exercise of power disrupts the trust-building process. But power and conflict are also potentially positive, creative elements that are central to the very process of organising.	Importance of skilled facilitation to resolve conflicts, build collaboration. Conflict is not undesirable and may be necessary element at boundary. Accountability is related to personal perspective and ability to represent that position.	(1)adaptability/flexibility is required at the boundary (2)interpersonal/communication skills are crucial (4)empowered voice relies on link of trust (5)position of power sets level of diplomacy needed	SECI: this is S - E. Need facilitation to get out of S. Navigating Conflict/Tension appears to be a theme. Trust may be based on knowledge/understanding of what other represents/does.	Hardy et al. (2006) Swimming with sharks: creating strategic change through multi-sector collaboration.

Horizontal	Sectoral	Increase in department size increases buffering and boundary spanning subunit structures. Departments in private hospitals performed better than government-owned when consider discharge rate and costs. Smaller inpatient psychiatric departments were found in private general hospitals and were not related to relative size of administrative staff. Size was negatively related to rate of discharge. Increases in size were correlated with attempts to buffer the technology of inpatient care. Measures of effectiveness were not used in this study.	Larger organisation means more need for boundary spanning subunits to buffer	(1)adaptability/ flexibility is required at the boundary	SECI: this is C-I. Findings confirm Thompson, 1967.	Hrebiniak & Alutto (1973) A comparative organizational study of performance and size correlates in inpatient psychiatric departments.
Horizontal	Sectoral	Mental health Link Worker as innovative role. Evaluation of MHLW role – received well by both groups despite stated barriers. Key themes: ability of MHLW to improve communication and encourage understanding. (1) seen as means as access to services and info (2) preferred ways of working. MHLW has addressed key areas: raising awareness of MH issues, appreciation of range of services, ways of supporting students (3) sharing expertise. There is uncertainty related to role when disparity between current practice and policy guidance. Sharing skill and competency link to acceptance. Ring-fencing liaison time releases staff. Communication skills are key. Participants felt that shared management would simplify administrative systems.	Expertise is legitimacy. Ring fencing liaison time releases staff.	(1)adaptability/ flexibility is required at the boundary (2)interpersonal/ communication skills are crucial (3)role identity is built on skill competency (4)empowered voice relies on link of trust	SECI: this is S-E. Socialising to inform about explicit knowledge.	Hunter et al. (2008) Introduction of a child and adolescent mental health link worker: Education and health staff focus group findings.

Horizontal	Sectoral	Individual self-rated change is not the same health impact. Shared learning and team building can impact short term awareness/vision and understanding of system change but doesn't necessarily lead to action. Facilitated effort can cultivate collaboration. Major accomplishment was bringing people together and expanding the number and diversity of partners involved in the faith/health conversation. Planning for implementation happened but goal of reduction of health disparities did not.	Shared learning increases awareness increases satisfaction. Facilitated effort can cultivate collaboration. Shared learning increases awareness increases professional validation, but is not sufficient for changing practice or producing outcomes.	(2)interpersonal/ communication skills are crucial	SECI: this is S. Socialisation happened in movement from S-E and products were created, but without action-oriented outcomes. C-I if neglected, decreases chance of action or impact.	Kegler et al. (2007) Evaluation findings from the institute for public health and faith collaborations.
Horizontal	Organisation alSectoral	Positive relations were found between all three variables: organicness of structure, frequency of BS activity, and perceived environmental uncertainty. Boundary spanners are mediators whether uncertainty or org structure defines the role. Role determines Boundary Spanning behaviour (not organization). Boundary spanner as mediator between environmental influences and organization structure is supported. Only pertains to lowest levels of large institution. Frequencies of 8 BS behaviors are determined by the motivations and the prescribed role of the respondent and not a function of structural attributes of organisation.	Role determines Boundary Spanning behaviour (not organization structure). Boundary spanning mediates between organisation and context, but only at micro levels.	(1)adaptability/ flexibility is required at the boundary (2)interpersonal/ communication skills are crucial (5)position of power sets level of diplomacy needed	SECI: this is C-I. C-I is important to effectiveness - especially when role is already understood.	Leifer & Huber (1977) Relations among perceived environmental uncertainty, organization structure, and boundary-spanning behavior.
Horizontal	Professional	4 Key Functions of information/change agent (i.e. boundary spanner, information seeker, knowledge translator and change champion) in the context of situated practice and learning. Frontline staff are task driven, coping with heavy workloads	Boundary spanner can be information and change agent. Power of voice - tensions arise in conflict. Rhetoric of accountability is potent and places a	(1)adaptability/ flexibility is required at the boundary (2)interpersonal/ communication skills are crucial	SECI: this is C-I. Bringing knowledge to routine. Theme of accountability is	MacIntosh-Murray & Choo (2005) Information behaviour in the context of

		<p>that limit attention to and recognition of potential information needs and knowledge gaps. A surrogate in an information-related role – an “information/change agent” – may intervene successfully with staff and engage in preventive maintenance and repair of routines. Themes: POWER voice, tensions arise in conflict. (1) Information needs of individuals (or groups) can be latent and may need to be revealed to them. (2) Identification of info needs and info seeking may be carried out by a surrogate. (3) routines can break down as a matter of course, but adverse outcomes can be prevented when a surrogate intervenes to repair the routine. (4) workers may not be as competent in critical thinking and info skills as might be assumed and required for their position. Tension arises from conflict between hope for reflection and reality of work situation. Nurses explicitly referred to 'having no power'; workers can engage in information-ignoring behaviour - knowledge needs may be latent. Information behaviours may be a means of resisting and dealing with implicit power issues.</p>	<p>heavy burden on individuals, and responsibility is given more weight than evidence of looking at processes or systems. Mismatch between delivery of quality improvement skills training and relevance of approach.</p>		<p>apparent. Is adaptability related to willingness and openness to learn?</p>	<p>improving patient safety.</p>
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Horizontal	Professional	Change in practice nurse roles - accounts tended to stress the acquisition of new knowledge and viewed the trend towards obtaining high level qualifications as a positive force for the profession. However focus on technical knowledge and acquisition of paper qualifications meant less emphasis placed on experiential learning, judgment and holism, including computerised templates. Nurses reliant on GP employers to allow their project to progress. Resentment and perception of unfair treatment regarding financial rewards, dissatisfaction with wage	Expertise is legitimacy. Increase competency, defend turf. Tension in new role.	(3)role identity is built on skill competency	SECI: this is E-C. Role defining study. Masculine (doctor) and female (nursing/care) roles are described - nurses take on new roles and are decoupled from caring?!	McDonald, Campbell & Lester (2009) Practice nurses and the effects of the new general practitioner contract in the English national health service: The extension of a professional project?
Horizontal	Professional	Although in principle skill sharing may be seen as a way of breaking down traditional roles and demystifying technical skills and knowledge, in practice volunteers in the clinics who did not have a nursing background did not wish to take on the responsibility of acquiring some of these skills, such as competently taking blood pressures. Ambiguities and uncertainties are fundamental to volunteers' participation in formal organisations and cannot altogether be eliminated, so must learn to work with it. Suggest guidelines.	Uncertainty of role leads to tension. Uncertainty creates tension. Responsibility and accountability are linked to role competence.	(3)role identity is built on skill competency	SECI: this is E. There is more tension with unclear guidelines for socialisation and clarity in role. Without S and C, E is a position of ambiguity.	Merrell (2000) Ambiguity: Exploring the complexity of roles and boundaries when working with volunteers in well woman clinics.



Horizontal	Professional	Managers act as boundary spanners across time. Transformational leadership style is associated with more supervision satisfaction with extended operational hours, and lower satisfaction if compressed operational hours. Capacity of managers to influence nurse supervision satisfaction varied relative to operational hours. Time is a boundary spanned by managers. Span but not time in staff contact, interacted with leadership and operational hours to explain supervision satisfaction. With extended operational hours, nurses were more satisfied with supervision when managers were highly transformational, and this effect was more pronounced under wider spans. With compressed operational hours, supervision satisfaction was lower with highly transformational leadership in combination with wider spans.	Satisfaction with supervisors when flexibility is supported	(1)adaptability/ flexibility is required at the boundary (2)interpersonal/ communication skills are crucial	SECI: this is I-S. More time spent with transformational manager increased work satisfaction.	Meyer et al. (2011) Front-line managers as boundary spanners: Effects of span and time on nurse supervision satisfaction.
Horizontal	Organisation	Boundary spanner group identification increases productivity, if frequent outgroup boundary spanning activity. Boundary spanning groups with frequent intergroup contact and strong organisational identity have more effective relationships. Group identification acts as a buffer. Enhance employee identification with organization to combat ineffective intergroup relations. Frequent intergroup contact of boundary spanning and high identification with organisation increases effective intergroup relations. Results suggest that managers may combat ineffective intergroup relations by enhancing employees' identification with their	Boundary spanning group identification increases productivity, if frequent outgroup boundary spanning activity. Frequent intergroup contact of boundary spanning and high identification with organisation increases effective intergroup relations.	(2)interpersonal/ communication skills are crucial	SECI: this is I-S. Socialisation plays an important role for increasing connection to the organisation and improving relationships.	Richter et al. (2006) Boundary spanners' identification, intergroup contact, and effective intergroup relations.

		organization, while acknowledging groups for their individual performance. Managers may consider boundary spanners identification along with intergroup contact as a starting point for intergroup interventions. Rotation of individual boundary spanner and promotion to boundary positions of employees who feel strong ties with both their work group and their organisation may help to overcome ineffective intergroup relations.				
Horizontal	Professional Organisation Sectoral	Fuel poverty is a public health issue. Linking 'up and across' - shared ownership of the project was identified as a success and was related to trust. Spanning also happens 'downwards' - seemed related to communication skills of individual with enthusiasm, positive attitude and ability to find solutions. Individual enthusiasm and follow through led to trust. 'Community-led' is positive outcome. Boundary spanners used facilitating tasks by sharing information, used strategies like linking the project to other processes (macro or micro) and had the traits and skills including ability to cajole, mediate, show interest in people, and be a leader.	Trust can be created in a shared learning environment. Boundary spanning role is more than communication, includes making connections and building trust across different groups.	(1)adaptability/ flexibility is required at the boundary (2)interpersonal/ communication skills are crucial (4)empowered voice relies on link of trust	SECI: this is S. S-E, strategic socialisation is important to gain trust.	Rugkasa, Shortt & Boydell (2007) The right tool for the task: Boundary spanners in a partnership approach to tackle fuel poverty in rural Northern Ireland.
Horizontal	Professional	Nursing deploys different forms of power to alter mental health division of labour to gain administrative, organisational, content control over own work to expand its jurisdictional boundaries. Mode of culture creation and nursing organization includes "guerrilla action". Health division of labour not based on legitimate professional jurisdiction, rational diversion of expert labour or civilized	Expertise is Legitimacy. Leaders need to be aware of political realities and struggles. Competency argued as domain of power.	(3)role identity is built on skill competency (5)position of power sets level of diplomacy needed	SECI: this is S.	Salhani & Coulter (2009) The politics of interprofessional working and the struggle for professional autonomy in nursing.

		interprofessional negotiations. Various forms of power were employed in political strategies and tactics. Nurses consciously created disciplinary solidarity and cultural strategies to keep dissenting nurses in line with coercive power. Collaborative power to cultivate and deploy allies used, as they waged a complex and subtle campaign though psychiatrists held significant actual and residual power. Reductions by actions of state-sanctioned managerialism may cause professionals to retreat to safety of own profession's interests.				
Horizontal	Professional Sectoral	Findings suggest that partners dealt with the tensions first by assuming a discrete identity as an 'entity of boundary people' that operates at the interface between the statutory sector authorities and the communities in question; also by reducing their activities to specific 'boundary' issues that do not threaten the main agenda of the authorities. Tension at boundary. Role priorities dominate attention. Time consuming burden working at unstable interface between organizations. Flexibility is needed at boundaries. Achieving role of boundary entity was a prized end. Facilitation and coordination activities resulted in considerable duplication of effort, with increasing demands spread amongst a limited number of people. Tokenistic inclusion of communities to comply with policy directives, and failure of authorities to respond to input resulted in frustration.	Tension at boundary. Role priorities dominate attention. Time consuming burden working at unstable interface between organizations. Flexibility is needed at boundaries. Communication skills are key. Incrementalism is a strategy for longer term achievement. Boundary role offers legitimacy - but working at an inherently unstable interface meant that considerable activity dedicated to resolving tensions and building partnerships through on-going accommodation. Priorities are determined by macro professional, organisational or political contexts. Contribution by boundary people was	(1)adaptability/ flexibility is required at the boundary (2)interpersonal/ communication skills are crucial (4)empowered voice relies on link of trust (5)position of power sets level of diplomacy needed	SECI: this is S. Socialisation is time consuming and not sufficient on its own.	Stern & Green (2005) Boundary workers and the management of frustration: A case study of two health city partnerships.

			possible because of capabilities for flexibility, innovativeness, and for negotiating shared agendas and compromises. Empowerment resulted from interacting with authorities - being a boundary entity was a prized end.			
Horizontal	Professional Organisation	Managers with more interface with other agencies perceived more risk and uncertainty at multiple levels. Service providers working within own agency with clients perceived few risks and uncertainties; experience trust-based relationships as relatively unproblematic. Collaborative relationships carry more risk and potentially more harmful uncertainties for managers, depending on role. More boundary means more risk.	More interface increase more risk and more perceived uncertainty. Perspectives on Trust and control is consistent with position in partner organization. Accountability is a key aspect of level of uncertainty.	(5)position of power sets level of diplomacy needed	SECI: this is S-E. Attention to systematic (I) and routine (C) aspects of forming partnerships is crucial. GP commissioning then may increase problematic trust issues.	Walker, Smith & Adam (2009) Making partnerships work: Issues of risk, trust and control for managers and service providers.
Horizontal	Professional Organisation Sectoral	Communication skills are important. Relationship building is important. Ability to resolve conflict is needed. Competency is key. Boundary spanners need to be knowledgeable in one area of expertise to act as a kind of passport of legitimacy for engaging with people from other organizations- harnessing the power that is associated with knowledge. The ability to be creative, innovative, and entrepreneurial is important in joint working environments, particularly where the design of effective solutions to complex problems, the skilful negotiation of sustainable partnership agreements	Knowledge is associated with legitimacy and ability to harness power. Ability to be creative and innovative is important to developing new solutions. Expertise is power. Communication skills are important	(1)adaptability/ flexibility is required at the boundary (2)interpersonal/ communication skills are crucial (3)role identity is built on skill competency (4)empowered voice relies on link of trust	SECI: this is S-E. Role identity defined as 'brand' equity.	Williams (2002) The competent boundary spanner.

	<p>involving a number of different agencies, and the mobilization of resources packages is needed. Interviewees highlight the value of opportunism as well as the ability to collaboratively fashion new solutions to previously intractable problems. It is the constant exposure to others that enables an understanding of their viewpoints, constraints, cultures, working practices. Also highly regarded is a track record of employment in different types of organisation and sector. The belief is that experience of different cultures, ways of working, roles and responsibilities and past networks - insider knowledge - is invaluable for both making connections and understanding the motivations, mind-sets and behaviours of colleagues in partner agencies. Building sustainable relationships - personality, trust.</p>				
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**Appendix D Observation Information Sheet for Staff**



**Sharing knowledge to  
improve patient care**

**Observation Information Sheet  
For Staff**

Staff in this primary care trust are taking part in a research study and a researcher would like to observe them as they work and speak with each other, and other members of the Westpark Initiative. Anything we observe will be kept completely anonymous. Your name and identity will be kept confidential and will not appear in any of the research.

This research study is being carried out by health researchers from King's College, London and is examining how information is shared between staff who work in the same, or in different, departments or organisations. Patients' experiences of care and the quality of care they receive are likely to be influenced by how well staff collaborate to share information. However, it is uncertain how to identify effective ways to link knowledge across departments and organisations and so we are undertaking this study to inform decisions about how to improve the experiences of both patients and the staff who care for them.

**This is an important study and we hope it will ultimately improve the care given by staff to patients, both in primary care by GP services and other services outside hospital.**

The researchers are interested in observing staff while they interact with others in teams, workshops, and at conferences. Researchers will observe and will be making notes. The research team is not judging

you or other staff, rather we are trying to capture the real life experiences of healthcare staff working in complex settings.

#### **Do I have to be involved?**

It is up to you to decide whether or not you wish to be involved. If you have any questions about the proposed research observation, please ask us. If you are happy to be observed you are still free to withdraw at any time and without giving a reason. **If you are NOT happy to be observed at any point in the event or meeting then please indicate this to the researcher; declining to take part in the study will not affect your current or future work in any way.**

#### **Contact for Further Information:**

If you have any questions regarding this study, please contact a member of the research team. Dr. Glenn Robert can be contacted by telephone on 07803 706 XXX or by email at [glenn.robert@kcl.ac.uk](mailto:glenn.robert@kcl.ac.uk)

**Thank you for taking the time to read this information.**

Dr. Glenn Robert  
Principal Investigator

This study has been approved by an NHS Research Ethics Committee and by the local R & D department at the Trust.

**Appendix E Detail of Observations Undertaken**

Date	Event	Purpose (researcher tasks)	Hours
25 Nov 2009	Stakeholder event	Observed. Scoping	4
10 Dec 2009	WI Team leader meeting	Observed. Scoping.	2.5
10 Feb 2010	Stakeholder event	Observed.	3
10 Feb 2010	WI Team Leader meeting with GP founder	Observed. Also, conversations with team leaders after event	2.0
11 Feb 2010	Masterclass	observed	4.5
10 Mar 2010	Masterclass	observed	4
22 Apr 2010	Stakeholder event	observed	5
28-30 Apr 2010	Off-site Retreat	Observed. Scoping. After meeting conversations with participants.	34
17 June 2010	Masterclass	observed	4
17 June 2010	Applied research unit meeting	observed	2
23 June 2010	Meeting with WIP14N	To discuss possible outcome measures	1
23 June 2010	Meeting at PCT: with GP Founder	To discuss possible outcome measures	2
23 June 2010	Meeting with WIP11K	To discuss possible outcome measures	1
23 June 2010	Meeting with WIP13M	To discuss possible outcome measures	1
23 June 2010	Joint PBC meeting	observed	3
30 June 2010	Phone conversation WIA5E	To discuss how meeting evaluations are done internally	1
1 July 2010	CLAHRC event	To observe Anxiety & Depression team. Discussion of possible outcome measures	8
7 July 2010	Meeting with WIA16P	To discuss possible outcome measures	1
7 July 2010	Masterclass	observed	2
7 July 2010	Meeting with WIL2B	To discuss possible outcome measures	1
7 July 2010	Applied research unit meeting	observed	1
8 July 2010	Stakeholder event	observed	4
6 Oct 2010	Meeting with GP Founder	To discuss outcome measures	4
8 Oct 2010	GP conference – GP founder presents to wide audience - Presentation of model	observed	2
8-9 Oct 2010	GP conference	Observed GP Founder interacting with other GPs	8
20 Oct 2010	Team Leader Meeting – planning session	observation	4
22 Oct 2010	Meeting with GP founder	Discuss conceptual model (co-design tools)	2
17 Nov 2010	Local GP meeting	GP consortia topics (piloting tools)	3
18 Nov 2010	Stakeholder event	Presenting / Planning (co-design tools)	7
25 Nov 2010	Stakeholder event	Presenting/Planning	7.5



		(recruiting)	
14 Jan 2011	WI team meeting	Planning session	3.5
3 Feb 2011	Diabetes Staff Training	Lead by BS team leader	4
3 Feb 2011	Interview WIL1A	Data collection	1
4 Feb 2011	Interview WIL2B	Data collection	4
8 Feb 2011	Interview WIL3C	Data collection	1.5
8 Feb 2011	Interview WIL4D	Data collection	2
8 Feb 2011	Interview WIA5E	Data collection	1
10 Feb 2011	Mental Health Staff Training	Lead by BS team leader	4
12 Feb 2011	Interview WIG6F	Data collection	2.5
14 Feb 2011	Interview WIL7G	Data collection	2
14 Feb 2011	Interview WS32012	Data collection	3
17 Feb 2011	Staff Training – Data Mngmt	Lead by GP Founder	2
18 Feb 2011	Interview WIL9I	Data collection	2
21 Feb 2011	Interview WIP10J	Data collection and tour	3
23 Feb 2011	Interview WIP11K	Data collection	2
23 Feb 2011	Interview WIP12L	Data collection and tour	2.5
1 Mar 2011	Interview WIP13M	Data collection	1
1 Mar 2011	Interview WIP14N	Data collection	1
1 Mar 2011	Interview WIP15O	Data collection	1
3 Mar 2011	Child Family Services Training event	Lead by BS team leader (attended by GR)	4
10 Mar2011	Dementia Training event	Lead by BS team leader	5
17 Mar 2011	Interview WIA16P	Data collection	1.5
31 Mar2011	Stakeholder event	(researcher presents)	5
5 April 2011	Interview WIA17Q	Data collection	1.5
7 April 2011	Local GP meeting	Local Planning session	6.5
7 April 2011	Conversation with patient/citizen	at local planning session	0.5
7 April 2011	Interview WIP18R	Data collection	2
8 Aril 2011	Interview WIP19S	Data collection	2
8 April 2011	Interview WIP20T	Data collection and tour	2.5
8 April 2011	Interview WIP21U	Data collection	1
11 May2011	Retreat	Planning workshops	6
12 May2011	Retreat	Groups, seminars, meals	16
13May2011	Retreat	Groups, presentations	10
24may2011	Meeting with Diabetes team leader	Data discussion	2
25may2011	Diabetes staff training	Observed. BS team leader observed.	5
13 June 2011	Interview WIA22V	Data collection	1

13 June 2011	Interview WIA23W	Data collection	1.5
20june2011	Meeting with Diabetes team leader	Data discussion	1
23 June2011	WI leader planning session	regroup	3
23 June 2011	Interview WIL24X	Data collection	2
24 June 2011	Interview WIP25Y	Data collection	1
24 June2011	Meeting with WI Founder	Data discussion	3.5
6 July2011	MH Team leaders attend CLAHRC event	BS team leader presents and group attends	9
7july2011	WI leader planning meeting	planning	3
21 july2011	Local GP meeting	Local planning session (attended by GR)	3
8 sept 2011	Diabetes team meeting	Team planning session	3
9 sept 2011	Talk with Diabetes team leader	Data discussion	2
19 sept2011	Talk with Diabetes team leader	Data discussion	2
27sept2011	Local GP meeting	Planning session	3
29 sept2011	MH Team leaders attend CLAHRC event	BS team leader presents and group attends	3
29sept2011	Diabetes staff training	BS team leader presents	4.5
30 sept 2011	Interview (repeat) WIL2B	Data collection	3
30sept2011	ICO meeting	BS team project	2.5
4 Oct 2011	Interview WIP28BPD	Data collection	1.5
7oct 2011	Meeting with GP founder	Discuss data collection	4
10 Oct 2011	Interview WIP29C	Data collection and tour	3
11 Oct 2011	Interview WIP30D	Data collection	1.5
11 Oct 2011	Interview WIP31E	Data collection	1
14 Oct 2011	Interview WIP32FA + WIP32FB	Data collection	3
17 Oct 2011	Interview WIP33G	Data collection	2
19 Oct 2011	Interview (followup) WIP10J	Data collection	2
25 Oct 2011	Interview WIP34H	Data collection	1
31 Oct 2011	Interview WIP 35I	Data collection	1
2 nov 2011	Meeting with GP founder	Discuss data collection	1
9 Nov 2011	Interview WIP36J	Data Collection	1.5
11nov2011	Meeting with GP founder	Discuss data collection	1
16nov2011	Meeting with team participants	Discuss data collection	1
17nov2011	Meeting with GP founder	Discuss data collection	1
18nov2011	Meeting with GP founder	Discuss data collection	1
21 Nov 2011	Interview WIP37K	Data collection	1
22nov2011	Local GP meeting	observed	3

25nov2011	Meeting with participant	Discuss current issues	2
2 Dec 2011	Meeting with GP founder	Discuss data collection	2
5 dec 2011	Meeting with Diabetes team leader	Discuss data collection	1
12dec2011	Meeting at PCT	Discuss secondary data collection	3
19 Jan 2012	Phone conversation – public health	Discuss current issues / access	1
20 Jan 2012	Meetings at PCT/ Interviews: followup WIL4D; WIL24X	Discuss current issues Data collection	6
14 Feb 2012	Interview WIP38L	Data collection	2
16 Feb 2012	Focus Group at GP Surgery	Observe staff, setting, patients.	2.5
29 Feb 2012	Phone conversation – patient rep	Discuss current issues / access	1
26 Mar 2012	Meeting with GP founder	Discuss Current Issues	3
28 Mar 2012	Meeting at PCT	Researcher panel discussions with staff	3
2 Apr 2012	Meetings at wellbeing service	Discuss secondary data collection	1.5
2 Apr 2012	Interview (repeat) WIP18R	Data collection	2
16 May 2012	Mental health training in Coxford	Observed	3.5
29 May 2012	Interview WIP39M	Data collection	4

## Appendix F Staff Information Sheet



### Staff Information Sheet: SHARING KNOWLEDGE TO IMPROVE PATIENT CARE

We would like to invite you to take part in a research study. This research study is being carried out by health researchers from King's College London and funded by the National Institute of Health Research. We are looking at understanding how health care professionals share information to improve patient care. Before you decide whether to take part, you need to understand why the research is being carried out and what it would involve for you. Please take time to read the following information carefully. Ask us if there is anything that is not clear or if you like more information; our contact details are at the end of this sheet.

#### What is the purpose of the project?

Our study seeks to examine the processes that contribute to the provision of better health care across professional and organisational boundaries. It addresses two areas: (1) how knowledge is shared across boundaries, and (2) how this shared knowledge is used to inform decision-making to improve the quality of patient care.

#### Why are you inviting me to take part?

Your organisation has agreed to take part in the study and we are inviting members of staff to participate in one or more ways (see below).

#### How will I be involved in the project?

Taking part in the research will mean sharing your views on various aspects of current practice in your organisation. You may be invited to take part in up to three different ways:

*Interview:* we will invite a number of staff to be interviewed, either by telephone or face to face by a member of the research team. If invited and you agree to participate in an interview, this can take place at a time and location of your choosing, and a member of the research team will come to meet with you and talk to you informally for up to one hour. We would like to tape-record the interview that you take part in so we have an accurate record of what you tell us. The tape recordings will be transcribed, and anonymised. The recordings will be deleted after transcription. The data will then be analysed by the research team. With your permission, anonymised data (data which does not identify any one who has taken part) will be archived for up to three years after the end of the research, for use by other researchers for other purposes. We will ask you to sign a consent form agreeing to take part in the interview.

*Online Survey:* the same staff members who are interviewed, will also be invited to participate in an online survey. If invited and you agree to participate in an online survey, reminders for the survey will be emailed to participants. Encryption features and masked IP addresses will be used at all times for protecting sensitive data.

*Observation:* observation of meetings will be undertaken over a two year period. All notes and data collected will be anonymised. Individual members of staff will be free to ask us to stop observing them at any point.



#### **Are there any benefits in taking part?**

There are no direct benefits to you as an individual. There may be benefits for the primary care trust because this study will provide evidence for future policy relating to measuring and improving patient care. We hope that this research will generate knowledge that will inform policy more widely in this area.

#### **Are there any risks in taking part?**

In an unlikely situation of encountering serious malpractice it would be our professional duty to report to the appropriate authority.

#### **Will my taking part in the study be kept confidential?**

Involvement in this research study is entirely voluntary and your responses are entirely confidential. All data and field notes will be given a code to ensure anonymity and stored in a locked filing cabinet or on a password protected computer secured against unauthorised access. Online data will be encrypted and IP addresses will be masked from the survey author. If you tell us something that indicates there is a risk of harm to yourself or someone else, then we will seek advice on whether we should disclose (tell a relevant agency or statutory authority) this risk.

#### **Has this study been reviewed by an ethics committee?**

This study has been reviewed and given approval by the NHS Research Ethics Committee: XXXXX REC X reference number: 10/H0717/48.

#### **What will happen to the results of the research study?**

The results of the project may be used to inform future policy, be published in academic journals and/or presented at professional and academic conferences. Anonymised extracts from the interviews may be used in publications arising from this research. Reports or papers resulting from the research will not identify any one who has taken part. The anonymised interview transcripts, with your permission, may be made available to other researchers and students for teaching / further research.

#### **Do I have to take part?**

It is up to you to decide whether or not to take part. If you do decide to take part you will be given this information sheet to keep and be asked to sign forms consenting to the tape recording of your interview and being observed. If you decide to take part you will still be free to withdraw at any time and without giving a reason.

#### **Who is organising and funding the project?**

The National Institute for Health Research is funding this programme of work. The project is being organised and conducted by King's College London.

#### **Further information**

Thank you for reading this information. If you would like further information about the project, please call Laura Nasir on 020 7848 XXXX email: [laura.1.nasir@kcl.ac.uk](mailto:laura.1.nasir@kcl.ac.uk) or Glenn Robert on 07803 XXXXX email: [glenn.robert@kcl.ac.uk](mailto:glenn.robert@kcl.ac.uk). Further details of the project and wider NNRU research programme are available at: <https://www.kcl.ac.uk/schools/nursing/nrru/>

## Appendix G Staff Consent Form



Participant Identification Number for this study:

**Sharing knowledge to improve patient care**

### CONSENT FORM FOR STAFF INTERVIEWS

Name of Researcher: Laura Nasir

Please Initial box

1. I confirm that I have read and understand the information sheet dated 16 August 2010, version 5 of the above study and have had the opportunity to ask questions. ☐
2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason, without my employment or legal rights being affected. ☐
3. I agree to be interviewed by the researcher named above and for the interview to be tape-recorded. I understand I am free at any time to ask the researcher to stop. ☐
4. If I withdraw from the study, I do give my permission for my data to be used. ☐
5. I agree to the data being kept for 3 years and then being destroyed and understand that all identifying information about me will be removed to protect my identity. ☐
6. I agree to take part in the above study. ☐

\_\_\_\_\_  
Name of Participant

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Researcher

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature

## Appendix H Interview Guide

Thank you for taking the time to meet with me for this research study. This interview is being recorded. This conversation, and others, will be transcribed and analysed by a research team at King's College London and the National Nursing Research Unit. Your responses with identifiable information will not be shared with others outside the research team or with any NHS staff. The recorder is on.

1. Please tell me about the WI. What is it all about?
2. I'd like to ask you some questions about your involvement with the WI project.
  - a. When did you first hear about the project?
  - b. Why did you get involved with the WI?
  - c. At that time, what did you hope the WI might accomplish?
3. Now that you have been involved with the WI for a while, what do you think about how it has affected you?
  - a. In what ways has your thinking changed due to this project?
  - b. In what ways has how your daily work changed due to this project?
  - c. In what ways has your workplace changed due to this project?
  - d. In what ways has the quality of care for your patients changed due to this project?
4. What has gone well, been improved or been implemented because of your involvement in the WI?
  - a. What are the achievements? Can you give specific examples?
5. What has helped or facilitated the projects you have been involved with as a part of the WI?
  - a. Can you give specific examples?
6. What barriers or challenges have you experienced as a part of your involvement in the WI?
  - a. What are the disappointments? Can you give specific examples?
7. If the WI had never happened what would be different now?

- a. For you?
  - b. For your patients?
  - c. For the system in which you work?
    - i. Could you describe an example?
8. Up to now, what do you think has been the overall impact of the WI?
- a. Why?
9. Given everything that is happening now, is the WI still relevant today?
- a. On a scale of zero to ten, zero being not relevant at all and 10 being the most relevant, how would you rate the relevance of the WI?
  - b. Why or How so?
10. Is there anything else you would like to share, as related to your work with the WI?
11. Is there anyone that you would suggest we need to talk to about this subject?

**Thank You** very much for your time and willingness to take part in this research study.

I am turning off the recorder now.



**Appendix I List of Interviewees**

<b>Participant by ID</b>	<b>Date</b>	<b>WI team</b>	<b>Professional role</b>	<b>Role in WI</b>	<b>Interview type (1st, f/u, or post diary)</b>	<b>Diary (yes or no)</b>	<b>Westpark or Coxford based</b>	<b>Current clinical role</b>
WIL1A	03-Feb-11	CFS	Former community matron	Team leader	1st	no	Westpark	no
WIL2B	04-Feb-11	All	GP; clinical lead	Founder and leader	1st	no	Coxford	yes
WIL3C	08-Feb-11	Dementia	Specialist Practitioner Nurse	Team co-leader	1st	no	Westpark	yes
WIL4D	08-Feb-11	Diabetes	PBC Manager	Team leader	1st	yes	Coxford	no
WIA5E	08-Feb-11	All	Commissioner	Administrator	1st	no	Coxford	no
WIG6F	12-Feb-11	All	GP; GP tutor	Participant	1st	no	Coxford	yes
WIL7G	14-Feb-11	ADBME	Therapies BME Lead; nurse	Team leader	1st	no	Westpark	yes
WS32012 (#8)	14-Feb-11	none	Therapist; organisational behaviourist	External consultant	1st	no	none	yes
WIL9I	18-Feb-11	Dementia	Assistant Director Mental Health Trust	Co-Leader	1st	no	Westpark	yes
WIP10J	21-Feb-11	ADBME	CBT Therapist; Mental Health Worker	Team member	1st	yes	Westpark	yes
WIP11K	23-Feb-11	ADBME	Community Worker	Team Member	1st	no	Westpark	yes
WIP12L	23-Feb-11	CFS	Integrated Service Manager; child and family service organisation	Team Member	1st	yes	Westpark	yes
WIP13M	01-Mar-11	All	Interim Director of ICT	Participant	1st	no	Coxford	no
WIP14N	01-Mar-11	All (IT)	PBC Manager	Team leader	1st	no	Coxford	no
WIP15O	01-Mar-11	none	Head of partnerships & diversity	Participant	1st	no	Coxford	no

WIA16P	17-Mar-11	All	PBC manager	Administrator	1st	no	Coxford	no
WIA17Q	05-Apr-11	none	Clinical Director	Participant	1st	no	Coxford	no
WIP18R	07-Apr-11	Dementia	Social Worker	Team leader	1st	yes	Westpark	yes
WIP19S	08-Apr-11	none	Learning & Development Mgr	Participant	1st	no	Westpark	no
WIP20T	08-Apr-11	none	Coordinator, Westpark Community Alliance	Participant	1st	no	Westpark	no
WIP21U	08-Apr-11	CFS	Strategic Manager	Participant	1st	no	Coxford	no
WIA22V	13-Jun-11	none	Commissioning Manager - Older People	None	1st	no	Coxford	no
WIA23W	13-Jun-11	none	Director of Quality & Clinical Leadership; former nurse	None	1st	no	Coxford	no
WIL24X	23-Jun-11	CFS	Commissioner; Midwife	Team leader	1st	yes	Coxford	no
WIP25Y	24-Jun-11	none	Head of Medicine Management; Pharmacist	Participant	1st	no	Coxford	no
WIP26ZPD	none	ADBME	CBT Therapist; MHW	Participant	none	no	Westpark	yes
WIP27APD	none	ADBME	CBT Therapist; MHW	Participant	none	yes	Westpark	yes
WIP28BPD	04-Oct-11	ADBME	Community Worker	Participant	post diary	yes	Westpark	yes
WIP29C	10-Oct-11	Diabetes	Community Services	Participant	1st	no	Westpark	no
WIP30D	11-Oct-11	ADBME	MH Home Treatment	None	1st	no	Coxford	yes
WIP31E	11-Oct-11	ADBME	Specialist Wellbeing Advisor	Participant	1st	no	Coxford	yes
WIP32FA	14-Oct-11	none	Retired chief nurse	None	1st	no	Coxford	no
WIP32FB	14-Oct-11	none	Retired medical officer	None	1st	no	Coxford	no
WIP33G	17-Oct-11	Diabetes	Diabetic Specialist Nurse	None	1st	no	Coxford	yes
WIP34H	25-Oct-11	none	Pharmacist	None	1st	no	Coxford	yes

WIP35I	31-Oct-11	Diabetes	Lead Dietician	None	1st	no	Westpark	yes
WIP36J	09-Nov-11	CFS	Commissioning - children	Participant	1st	no	Coxford	yes
WIP37K	21-Nov-11	none	-OT Rehab staff	Participant	1st	yes	Coxford	yes
WIP38L	14-Feb-12	CFS	Public Health; Health Training Coordinator	Participant	1st	no	Coxford	no
WIP39M	29 May 12	MH	Head of Service	Participant	1st	no	Westpark	yes
WIL2BFU	30-Sep-11	All	GP; clinical lead	Leader	f/u	no	Coxford	yes
WIL4DPD	20-Jan-12	Diabetes	PBC Manager	Leader	post diary	yes	Coxford	no
WIP10JPD	19-Oct-11	ADBME	CBT Therapist; MHW	Team member	post diary	yes	Westpark	yes
WIP18RPD	02-Apr-11	Diabetes +ADBME	Social Worker	Participant	post diary	yes	Westpark	yes
WIL24XPD	20-Jan-12	CFS	Commissioner; Midwife	Participant	post diary	yes	Coxford	no
FG1DM01	16-Feb-12	Diabetes	patient	Patient focus group	none	no	Westpark	no
FG1DM02	16-Feb-12	Diabetes	patient	Patient focus group	none	no	Westpark	no
FG1DM03	16-Feb-12	Diabetes	patient	Patient focus group	none	no	Westpark	no
FG1DM04	16-Feb-12	Diabetes	patient	Patient focus group	none	no	Westpark	no
FG1DM05	16-Feb-12	Diabetes	patient	Patient focus group	none	no	Westpark	no
FG1DM06	16-Feb-12	Diabetes	patient	Patient focus group	none	no	Westpark	no
FG1DM07	16-Feb-12	Diabetes	patient	Patient focus group	none	no	Westpark	no
FG1MH01	19-Mar-12	ADBME	patient	Patient focus group	none	no	Westpark	no
FG1MH02	19-Mar-12	ADBME	patient	Patient focus group	none	no	Westpark	no

## Appendix J Diary Template

**SIP18RPD-DM1 Participant Diary – Integrating Care for Patients with****1. Introduction****Explanation of Study**

You have been invited to take part in a research study. This research study is being carried out by health researchers from King's College London and funded by the National Institute of Health Research. We are looking at understanding how health care professionals share information to improve patient care. Our study seeks to examine the processes that contribute to the provision of better health care across professional and organisational boundaries. It addresses two areas: (1) how knowledge is shared across boundaries, and (2) how this shared knowledge is used to inform decision-making to improve the quality of patient care. Please see the 'study information sheet' for further details.

This is an online Participant Diary in which we are asking you to briefly capture your thoughts **EVERY TWO WEEKS FOR A TWO MONTH PERIOD**. The Diary questions will always be the same and should take 5-15 minutes to complete.

We are looking for **YOUR REFLECTIONS ABOUT THE SHARING OF INFORMATION ACROSS ORGANISATIONAL, SECTORAL AND PROFESSIONAL BOUNDARIES** as you consider your own daily work. Your insights about your daily experiences will be very helpful for describing how the coordination and integration of services happens across various parts of the health care system. Please answer as honestly as you can, thinking about your work/practice in the last two weeks.

Your answers will be **CONFIDENTIAL**, and will only be visible to the researchers, Laura Nasir and Glenn Robert. No identifiable information will be shared. Only general, anonymised, combined themes will be communicated as a part of the larger study findings.

**YOUR DIARY HAS A UNIQUE LINK FOR YOU ONLY.**  
This survey is encrypted for the security of your information.

This study has been reviewed and given approval by the NHS Research Ethics Committee:  
reference number: 16/H071748.

v.5 - 21 June 2011

Please select "NEXT" to proceed to the diary

## SIP18RPD-DM1 Participant Diary – Integrating Care for Patients with

2.

1. Please confirm the date and time in which you are completing this diary.

Today is:  /  /  :  :  AM/PM

2. Please tick the types of interactions you have had IN THE PAST TWO WEEKS with other healthcare professionals, representatives of the voluntary sector, patients/carers etc. AS A PART OF YOUR EFFORTS TO improve diabetes care in

	Primary health care professional	Secondary health care professional	Voluntary sector	Patient/carer	Social care	Education	Housing	Other (please specify)
Face-to-face meeting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Email	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Telephone call	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Document exchange	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Note	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Other (please specify)

3. Which of the above interactions have been the most important from your point of view in terms of being likely to help improve the quality of diabetes care in ?  
Please briefly explain why.

## SIP18RPD-DM1 Participant Diary - Integrating Care for Patients with

**4. In your work to improve diabetes care in \_\_\_\_\_ in the past two weeks which types of the following 'boundaries' did you cross, and approximately how many times did you interact across each boundary?**

	None	1-3	4-6	7-10	11-15	16-20	21+
ORGANISATIONAL (e.g. between one GP practice and another GP practice)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
SECTORAL (e.g. between primary care and acute care/hospital)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
PROFESSIONAL (e.g. between medicine and nursing or between clinical and non-clinical staff)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
GEOGRAPHICAL (e.g. between Southall and somewhere outside of Southall)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**5. Have any of these interactions in the past two weeks been with individuals or organisations you have not contacted/been contacted by before?**

☐ Yes

☐ No

If 'yes' please briefly describe :

### SIP18RPD-DM1 Participant Diary - Integrating Care for Patients with

**6. Please briefly tell us about anything that has happened in the past two weeks that has either been really exciting or really frustrating about your work towards improving diabetes care. Please consider issues related to coordinating and integrating multi-disciplinary care for patients with diabetes.**

**7. How confident are you feeling TODAY that the work you are involved in to improve diabetes care is**                      **will:**

	Not Sure	Not Confident At All	Not Very Confident	Quite Confident	Very Confident
Impact on the quality of patient care	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Impact on levels of staff motivation generally	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Impact on your own personal satisfaction at work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**8. We may wish to telephone you to discuss your answers in a little more detail. Please tick this box if you are happy for us to do so.**

- ☐ No, please don't call.
- ☐ Yes, you are welcome to call me.

Best telephone number to contact me:

Thank you for your time.

A reminder email will be sent to you, asking you to complete this diary every two weeks over a time period of two months. Have a good day.

## Appendix K Focus Group - Advertisement

Would you like to help?

Want to improve health care in Westpark?

We want to hear your perspective

We are a team of researchers studying how health care services connect and share knowledge to improve care.

Groups of patients and carers will be invited to talk together, once for 2 hours, about how care is being coordinated in Westpark around these topics of interest and areas of care: Diabetes, Dementia, Depression, Anxiety and Child & Family Health.

### **Are there any benefits in taking part?**

There are no direct benefits to you as an individual. There may be benefits to local health care services by providing evidence to inform managers of which processes improve the sharing of knowledge. Your travel expenses will be reimbursed and food and drink will be provided.

### **Will my taking part in the study be kept confidential?**

Involvement in this research study is entirely voluntary and your responses are entirely confidential. Details will be provided and you will be able to choose to take part or leave as you decide. Taking part in this study will not affect your treatment in any way and your GP and other clinicians will not be informed of your participation.

### **Who has reviewed this study?**

All research in the NHS is looked at by independent group of people, called a Research Ethics Committee, to protect your interests. This study has been reviewed and given favourable opinion by [\*\*\_Research Ethics Committee].

### **Queries? Call Laura Nasir at 020 07848 xxxx**

*Contact details for research team:* Dr Glenn Robert, James Clerk Maxwell Building King's College London. Telephone: 020 7848 3048 ([glenn.robert@kcl.ac.uk](mailto:glenn.robert@kcl.ac.uk))

Version 2 - 15 March 2010



**Appendix L Focus Group - Patient and Carer Invitation Letter**

[DATE]

[ADDRESS]

Dear [patient/carers name]

Invitation to participate in research study – focus group

Please find enclosed a 'Patient Information Sheet' relating to a study in the NHS that is examining the processes by which knowledge is shared between staff in order to improve patient care. As part of this study we would like to invite you to take part in a focus group discussion with other patients and carers. The information sheet provides further details and makes clear that your involvement in this study is entirely voluntary and your responses will be completely confidential.

A random sample of patients and carers from general practices in Westpark have been selected to take part in the study and you have been invited to take part on the understanding that you live and receive care in one of these practices. You have responded to one of our posters and so we are providing further information for you, should you decide to participate.

The focus group will be held at [venue] on [date], beginning at [start time] and lasting approximately two hours. We will refund your travel expenses and provide food and drink.

Please contact Laura Nasir on [contact details] if you are willing to participate in this focus group.

The study has been approved by the Research & Development department in your organisation, and by an NHS Research Ethics Committee.

Regards

Dr. Glenn Robert  
King's College London  
(on behalf of the research team)

Version 3 - 15 March 2010

## Appendix M Focus Group - Patient Information Sheet



### Patient Information Sheet: SHARING KNOWLEDGE TO IMPROVE PATIENT CARE

We would like to invite you to take part in a research study. This research study is being carried out by health researchers from King's College London and funded by the National Institute for Health Research. We are looking at understanding how health care staff work together to improve patient care. Before you decide whether to take part you need to understand why the research is being carried out and what it would involve for you. Please take time to read the following information carefully. Talk to others about the study if you wish. Ask us if there is anything that is not clear or if you like more information; our contact details are at the end of this sheet.

#### What is the purpose of the project?

The project aims to understand how health care staff share information with each other in order to provide better care for people outside hospital. The study is also for educational purposes.

#### Why are you inviting me to take part?

You are being invited to take part because you have recently used health care services within [Coxford]. We are very interested to hear the experiences of patients like you, and would like to invite you to share your experiences with us.

#### How will I be involved in the project?

Taking part in the research will mean you will have the opportunity to tell the story of your experience of receiving services in XXXXX. Taking part in the research will involve a group discussion with a member of the research team. We will arrange to meet with you and other patients and then talk to you informally for approximately one hour. During the discussion we will ask you about your experiences as a patient. The interviewer - who is not someone involved in your care but is someone experienced in interviewing patients - will be interested in those parts of your experience that you recall as being particularly positive or negative.

The group discussion will take place at a time and place that is convenient for you and other patients. If you would like a carer or friend to be at the discussion, just let us know. We will reimburse you for any travel expenses. We would like to tape-record the discussion so we have an accurate record of what you tell us. The tape recording will be transcribed, and anonymised. The recording will be deleted after transcription. The data will then be analysed by the research team. With your permission, anonymised data (data which does not identify any one who has taken part) will be archived for up to three years after the end of the research, for use by other researchers for other purposes. We will ask you to sign a consent form agreeing to take part in the group discussion.

#### Do I have to take part?

It is up to you to decide whether or not to take part. If you do decide to take part you will be given this information sheet to keep and be asked to sign forms consenting to the tape recording of the group discussion. If you decide to take part you will still be free to withdraw at any time and without giving a reason. A decision not to take part will not influence in any way the standard of care or treatment you receive.



**Are there benefits in taking part?**

There are no direct benefits to you as an individual. There will be benefits for health care services in [Coxford] because this study will provide evidence for future policy relating to measuring and improving patient experience. We hope that this research will generate knowledge that will inform policy more widely in this area.

**What are the possible disadvantages of taking part?**

Participation in the project will mean you will need to think about your condition and the care you have received. These questions are not intended to be upsetting, but may raise concerns for you. If you feel that outside of the discussion you would like to discuss these concerns please contact the research team and we will put you in contact with someone who can help.

**Will my taking part in this project be kept confidential?**

Involvement in this project is entirely voluntary. If you agree to take part, all information collected about you and your experiences during the course of the discussion will be kept strictly confidential. Transcripts of your stories will be coded for anonymity and stored in a locked filing cabinet or on a password protected computer secured against unauthorised access. No-one else will know you have taken part unless you choose to tell them. If you tell us something that indicates there is a risk of harm to yourself or someone else, then we will seek advice on whether we should disclose (tell a relevant agency or authority) this risk.

**What will happen to the results of the project?**

The results of the project may be used to inform future policy, be published in academic journals and/or presented at professional and academic conferences. Anonymised extracts from the interviews may be used in publications arising from this research. Reports or papers resulting from the research will not identify any one who has taken part. The anonymised discussion transcripts, with your permission, may be made available to other researchers and students for teaching / further research.

**Has this study been reviewed by an ethics committee?**

All research undertaken by King's College London is considered by an independent group of people, called a Research Ethics Committee, to protect your interests. This study has been reviewed and given approval by XXXXX REC X reference number: 10/H0717/48.

**Who is organising and funding the project?**

The National Institute for Health Research is funding this programme of work. The project is being organised and conducted by King's College London.

**Further Information**

If you would like further information about the project, please call Laura Nasir on 020 7848 XXXX email: [laura.1.nasir@kcl.ac.uk](mailto:laura.1.nasir@kcl.ac.uk) or Glenn Robert on 020 7848 XXXX email: [glenn.robert@kcl.ac.uk](mailto:glenn.robert@kcl.ac.uk). Further details of the project and wider NNRU research programme are available at <https://www.kcl.ac.uk/schools/nursing/nnr/>

## Appendix N Patient Consent Form



Participant Identification Number for this study:

### Sharing knowledge to improve patient care

## CONSENT FORM FOR PATIENT AND CARER FOCUS GROUPS

Name of Researcher: Laura Nasir

Please Initial box

1. I confirm that I have read and understand the information sheet dated June 2010, version 4 of the above study and have had the opportunity to ask questions. ☐
2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason, and without my medical care or legal rights being affected. ☐
3. I agree to take part in a focus group discussion facilitated by the researcher named above and for the focus group discussion to be observed by a researcher and tape-recorded. I understand I am free at any time to choose not to speak or to leave the discussion. ☐
4. If I withdraw from the study, I do give my permission for my data to be used. ☐
5. I agree to the data being kept for 3 years and then being destroyed and understand that all identifying information about me will be removed to protect my identity. ☐
6. I agree to take part in the above study. ☐

\_\_\_\_\_  
Name of Participant

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Researcher

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature

## Appendix O Focus Group - Discussion Guide

**INTRODUCTION SCRIPT:** To be read by researcher/group facilitator:

“You have been invited to take part in this research study because you have received care for diabetes in [Westpark]. Our study is looking at how links happen across organisations and how to make your health care better.

“For this discussion group I will invite you to share as much or little as you feel comfortable sharing with the other patients and carers in this group. This conversation will be tape-recorded for only the researchers to hear. Any recording of you taken today will not be used without your express consent.”

“I cannot guarantee the confidentiality of the discussion groups. You may choose not to speak, or may leave the discussion at any time, for any reason, without explanation. I do ask that each you respect the experience of everyone else in the group by not sharing the stories you hear today with others outside of this room. Please raise your hand if you can agree with this ground rule. Thanks.”

### QUESTIONS FOR DISCUSSION:

1. Please introduce yourself and tell us how long you have had diabetes.
2. Thinking about your experiences as a diabetes patient, what have been some of the different services, staff, departments or types of care that you used recently?
3. Thinking back, what sticks in your mind about what went well about being able to receive different kinds of services from different kinds of clinicians or practitioners?
4. Thinking back, do you think you received good care? Why or why not?
5. Now think about what needed to happen so that you could get these different kinds of services...
  - a. PEOPLE - Which staff has been MOST helpful to you?
    - i. Who helped you to get this service?
    - ii. Did someone coordinate?
    - iii. Was it this person's job assignment to help you?
    - iv. Who helped you to know what was going to happen next?
    - v. Did you always know who to call if you weren't sure about something?
    - vi. Can you give a specific example?
  - b. PROCESSES - How well ORGANISED has your care been?
    - i. Was care coordinated for you – if so – can you describe how?
    - ii. What sort of process had to happen so that you could get this service?
    - iii. Was there some sort of structure in place to help you get this service? Can you describe it?
    - iv. How well or poorly was information about your care shared between areas?
    - v. Did something happen that seemed unplanned but was helpful?
    - vi. Were there any mix-ups? How were they solved?
    - vii. Can you give a specific example?
    - viii. Timing and Anticipation - Did everything go smoothly? How so?
    - ix. Were there any misunderstandings? How were they sorted out?
    - x. How clear were your expectations of what might happen?
    - xi. How uncertain were you about the next steps in your care?
    - xii. Did something happen that you didn't expect?
    - xiii. Can you give a specific example?
6. If I had asked you these questions 12 months ago, with respect to a similar type of care, would the processes you described have been the same or different?
  - a. If different – in what ways? What has changed?

7. Do you think the quality of care has improved over the last year? Have things gotten better?
8. Thinking back to the people and processes related to your care, what part of these services could have been better or improved upon? If you were asked to advise the NHS on what it should do about increasing linkages between people and sections of the organisation, for better patient care, what would you suggest?
9. When thinking about making good connections for better care, is there anything else you think we should know about?
10. Is there anything you would like to add?

**CLOSURE SCRIPT:** To be read by researcher/group facilitator:

“Thank you very much for your time and willingness to share your experiences with us today. We will include your comments in our data to describe how patient care may be improved by boundary spanning processes in health care organisations.

## Appendix P Final Codebook

Academic - involvement induces improvement	Academic - need research to get evidence
Academic - too much research, not practical solutions	act as needed in the current context
Adaptations - are confusing	Adaptations - are possible
Adapting - Extra mile, willing to go, beyond the call of duty	Adapting - not technically in guidelines
Ba - C connecting - Systemising Ba	Ba - E articulating - Dialoguing Ba
Ba - I embodying - Exercising Ba	Ba - S empathizing - Originating Ba
Barrier - complex care needed	Barrier - costs
Barrier - diversity of sociocultural & language	Barrier - duplication of effort, paperwork, protocol
Barrier - financial structures or reorganisation	Barrier - geography, location, premises
Barrier - GPs don't know, don't care, don't listen	Barrier - Idea, solution surfaces but don't catch, not heard
Barrier - ineffective meetings, talking not doing	Barrier - IT problem or systems don't talk together
Barrier - job is changing	Barrier - MH condition not on referral form
Barrier - mistrust of PCT	Barrier - money motivation
Barrier - need multi-disciplinary help	Barrier - networking wanted but no one there
Barrier - no clear path, all work differently	Barrier - no connection to that service
Barrier - no enthusiasm, no holistic understanding	Barrier - not enough time
Barrier - not sharing information	Barrier - not sharing information in CFS
Barrier - not trained for this	Barrier - Perceived Inequality has a role in funding
Barrier - poverty	Barrier - racism, discrimination
Barrier - Referrals - consultants don't accept	Barrier - Referrals - GPs don't make or inappropriate
Barrier - resistance to change by professionals	Barrier - so many GP practices, providers
Barrier - staff are low paid, under trained	Barrier - targets, QIPP QOF
Barrier - to BS	Barrier - urgent has different meanings
Barrier Overcoming - by CFS team	Barrier Overcoming - by Dementia Team
Barrier Overcoming - by Diabetes Team	Barrier Overcoming - by Diabetes team-administrative barrier
Barrier Overcoming - by MH BME Team	Barrier Overcoming – by Westpark community group
Barrier Overcoming - face to face meeting	Barrier Overcoming - feedback
Barrier Overcoming - Focus Groups - with GPs	Barrier Overcoming - go to where people are
Barrier Overcoming - GPs unaware	Barrier Overcoming - Hierarchy Differential
Barrier Overcoming - in general	Barrier Overcoming - IT solution or Tool
Barrier Overcoming - learning to compromise	Barrier Overcoming - new professional role
Barrier Overcoming - Practice Manager - to get in to GP Surgery	Barrier Overcoming - problem identified, how to fix
Barrier Overcoming - promoting MH services	Barrier Overcoming- referral process adjusting
Barrier Overcoming - Setting Deadlines to Reach Goals Worked	Barrier Overcoming - sharing good treatment practices
Barrier Overcoming - speaking other languages	Barrier overcoming - team, utilise other professionals
Barrier Overcoming - want to learn more, more training	Barrier Overcoming - work with whole team not just GPs
Barrier Overcoming- Teaching, presenting in GP Surgery	Boundary Crossed - Generalist--Specialist
Boundary Crossed - GP-- other Professional	Boundary Crossed - GP-- GP
Boundary Crossed - MH -- other professional	Boundary Crossed - Primary Care -- Acute Trust

Boundary Crossed - Primary Care--Social Care & Secondary Care	Boundary Crossed - Professional -- Patient
Boundary Crossing - Health Link Worker - MH Team	Boundary Crossing - patient moves back and forth as needed
Boundary Crossing - placing professional or clinic in surgeries (at interface)	Boundary Crossing - Professional meet & learns about Professional
Boundary Crossing - professional placement, exchange	Boundary Crossing - want it to happen
BS - in the middle as liaison, gatekeeper	BS - not my job
BS as Threatening	BS brings new idea
BS not because of WI	Change - want to make it happen
Change here - to make change happen elsewhere	Chris - how he is viewed
Chris - work in past city	CLAHRC elements
CLAHRC is overarching, WI is local	CLAHRC training like WI
claiming involvement in WI for status not sincere participation	claiming involvement in WI increases status or opportunity
clustering practices	connectivity - builds accountability
connectivity - builds confidence	connectivity - builds new bridge, access or connection
connectivity - causes anxiety	Context - Current (local or national)
Context - Historical (local or national)	Continued Involvement after no formal reason
Continuity - improving access & communication that is easy to use by all	Critique of WI
Critique of WI - lack of clarity, structure	Critique of WI - provider centred
critique of WI - scalability	Critique of WI - wishy washy extra luxury
Cross Team Interactions	Dementia - no noticed changes
Dementia- participation	Diabetes - no impact no improvement seen
Diabetes learning – University course	distributive justice - all same care
Evidence - activity newly developed	Evidence - change in behaviour, attitude noted
Evidence - complex so hard to determine	Evidence - costs
Evidence - hard to get	Evidence - heard about didn't see
Evidence - Internal & External	Evidence - not sure what questions to ask
Evidence - patient outcomes can't see	Evidence - patient view
Evidence - referral rates	Evidence - relationships better I hope
Evidence is gathered	Evidence- need in order to continue
Expert Experience & Confidence Builds Trust	Flexibility - change what is needed in each area
Good Quotes	Improvement efforts
improvement in cost cutting and efficiency	Influence works across multidisciplinary team members
Innovation - introducing change	Integration - Horizontal
Integration - Vertical	Interface - anxiety about risk, who is responsible
Interface - being at	Interface - confusing inbetween
Interface - facilitating connecting	Interface - important necessary and challenging
Interface - improving knowledge, confidence as liaison	Interface - no job title for that
Interface - tension at	Involvement in WI invites new opportunity
Involving Community	Involving GPs
Involving Nurses	Involving Patients
Involving Practice Managers	Involving Professionals
Involving Public	Involving Receptionists
Involving Stakeholders	Job description does not reflect joined up work
Knowledge Assets - C systemic explicit explicit	Knowledge Assets - E conceptual tacit explicit
Knowledge Assets - I routine explicit tacit	Knowledge Assets - S experiential tacit tacit
Lateral thinking is not Hierarchical	Leader dismissed not acknowledged
Leader listens then does own thing for broader plan	Leadership oppression



Leading CFS team	Leading change is difficult in reality
Leading Dementia team	Leading Diabetes team
Leading MH BME team	Leading WI as a whole
Mentoring leaders	Mentoring Leaders didn't happen
Message - we are equal. Not hierarchy.	MH BME - no noted improvements
Multi-agency planning	multidisciplinary links increase
Multidisciplinary services	Mutliti-disciplinary Team - NOT WI
New Thinking - Same job	Nurse - Advanced role at interface
Objectives of CFS Team	Objectives of Dementia Team
Objectives of Diabetes Team	Objectives of MH BME Team
Project - good at disseminating ideas informally	People forgotten and Structure takes credit
personality - just want to learn more	personality - motivated by patient improvement
personality - variety keeps it interesting for me	Professional Development opportunity
Reflection on BS brought clarity in BS	Rejection of empowering process is desirable stage
Reliant on Goodwill	scale of approach relates to current context
seCi - CONNECTING - Systemic Knowledge Assets	sEci - EXTERNALIZATION - Conceptual Knowledge Assets
secl - INTERNALIZATION - Routine Knowledge Assets	Seci - SOCIALIZATION - Experiential Knowledge Assets
Seemless Flow - Information	Senior People do support effort
Senior People don't support effort	Senior People don't understand effort
services - all at same site	skill mix consideration
Success - Professional Growth	Streamlined services
Success of all WI	Success- Accountability is organic, not target
Success of Cumberland Lodge	Success of CFS Team
Success of Diabetes team	Success of Dementia Team
Supervision does not support reflection about system	Success of MH BME team
Surprise Opportunity	Supervisor encourages personal development
Training - wanting more	Training Events (not just WI)
Vignette - MH BME	Vignette - MH + Rehab
Vignette - Successful project NOT WI	Vignette - WI
Vignette- Dementia	Vignette CFS
Vignette- Diabetes	Westpark – why here
WI - as dependent on Chris's energy	WI - costs
WI - enthusiasm	WI - In the Beginning
WI - is inspiring	WI - job changing or loss, so not involved now
WI - near the end	WI - next version iteration
WI - NOT attending	WI - reaching those who typical do this - not silos
WI - Relevant - is it still relevant today	WI - Relevant - Scale of Relevance # today
WI - Supervising those involved	WI - sustainability
WI - the Approach	WI - the knock-on effect
WI - time consuming	WI - what I hoped it would accomplish
WI - What I learned from my involvement in it	WI - What if never happened what would be different now
WI - What is it	WI - Why involved
WI - Why Involved - Because my job assigned to it	WI - why involved - Chris approached me
WI aligned with what I was already doing	WI- losing interest in attending
WI Model Aspects that are Non-Negotiable	WI Model Theory of joined up working